THENATIONAL GEOGRAPHIC MAGAZINE

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TWENTY FOUR PAGES OF ILLUSTRATIONS IN FULL COLOR

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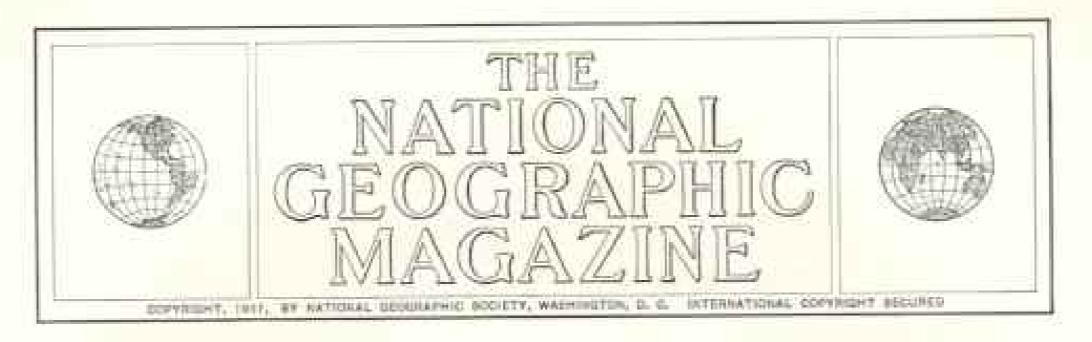
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THE GENESIS OF THE WILLIAMSBURG RESTORATION

BY JOHN D. ROCKEFELLER, JR.

HE restoration of colonial Williamsburg enlisted my interest and support because to see beautiful and historic places and buildings disintegrating had long caused me very real distress.

It was this feeling that moved me to aid in the restoration of Versailles, Fontainebleau, and Reims. To undertake to preserve a single building when its environment has changed and is no longer in keeping, has always seemed to me unsatisfactory—much less worth-while.

The restoration of Williamsburg, however, offered an opportunity to restore a complete area and free it entirely from alien or inharmonious surroundings as well as to preserve the beauty and charm of the old buildings and gardens of the city and its historic significance. Thus it made a unique and irresistible appeal.

As the work has progressed, I have come to feel that perhaps an even greater value is the lesson that it teaches of the patriotism, high purpose, and unselfish devotion of our forefathers to the common good. If this proves to be true, any expenditure made there will be amply justified.

It was Dr. Goodwin who first dreamed of a restored Williamsburg. What has been accomplished is largely due to him, to my associates, to the architects, the builders and the historians. But of equal importance has been the truly wonderful co-operation, sympathy, and understanding given the undertaking by the people of Williamsburg and of Virginia, both in official and in private life. From the very outset they have made the work a joy. Our association with them has been a continuing delight.

THE RESTORATION OF COLONIAL WILLIAMSBURG

By W. A. R. Goodwin

The restoration of colonial Williams-burg is dedicated to the hope and purpose "that the future may learn from the past." It is designed to preserve and re-create the symbols and memorials of a creative and colorful period of American history. The compelling reasons for its restoration lie in the historic background of the city, and in the intrinsic simplicity and alluring beauty of its architectural form.

Fortunately Williamsburg was built when life was simple. History here is symbolized by homes and venerable public buildings of

harmonious and beautiful design.

Colonial Williamsburg grew from the seeds of thought and purpose which were planted by the devotees of liberty. It is necessary, if we would understand the significance of the restoration, that we should pause upon the portals of the city restored, and appraise the educational and social values inherent in its historical background.*

History enkindles the imagination of man and quickens his sense of reverence, thus prompting him to preserve the memorials of the creative past and enabling him to appreciate these memorials when he stands in their presence. The restoration of this colonial city, by making America more conscious of its heritage, will help to develop a more highly educated and consequently a more devoted spirit of patriotism.

VAST EXPANSE OF COLONIAL VIRGINIA

A map of the territory given to the Virginia Company by King James I under the royal charter of 1606 would show that it first embraced a strip of land, from 75 to 100 miles wide, extending along the Atlantic seaboard from what now is South Carolina to the present Canadian border.

Within these bounds, or just beyond, it then was confidently believed, would be found the shores of the great western sea which would thence afford a near route to India and to other eastern lands.

"Captain Nathaniel Butler says in his History of the Bermudas: "Before we present you with the relation of matters of fact, it is fit to offer to your view the stage whereon they were acted. For (it is well said) as geography without history seemeth a carcasse without motion, so history without geography wandereth as a vagrant without certain habitation."

Neither gold nor the shores of the Pacific Ocean having been discovered within this area, the charter of 1609 extended the bounds of the Colony to the shores of the western sea, wherever those shores might be. This territory in both documents was named Virginia.

From time to time this area was curtailed by subsequent royal charters, or by ceded territory, so that in 1753 the Virginia territorial claims embraced the area now included in the western part of Pennsylvania, and the States of Virginia, West Virginia, Kentucky, Ohio, Indiana, and Illinois.

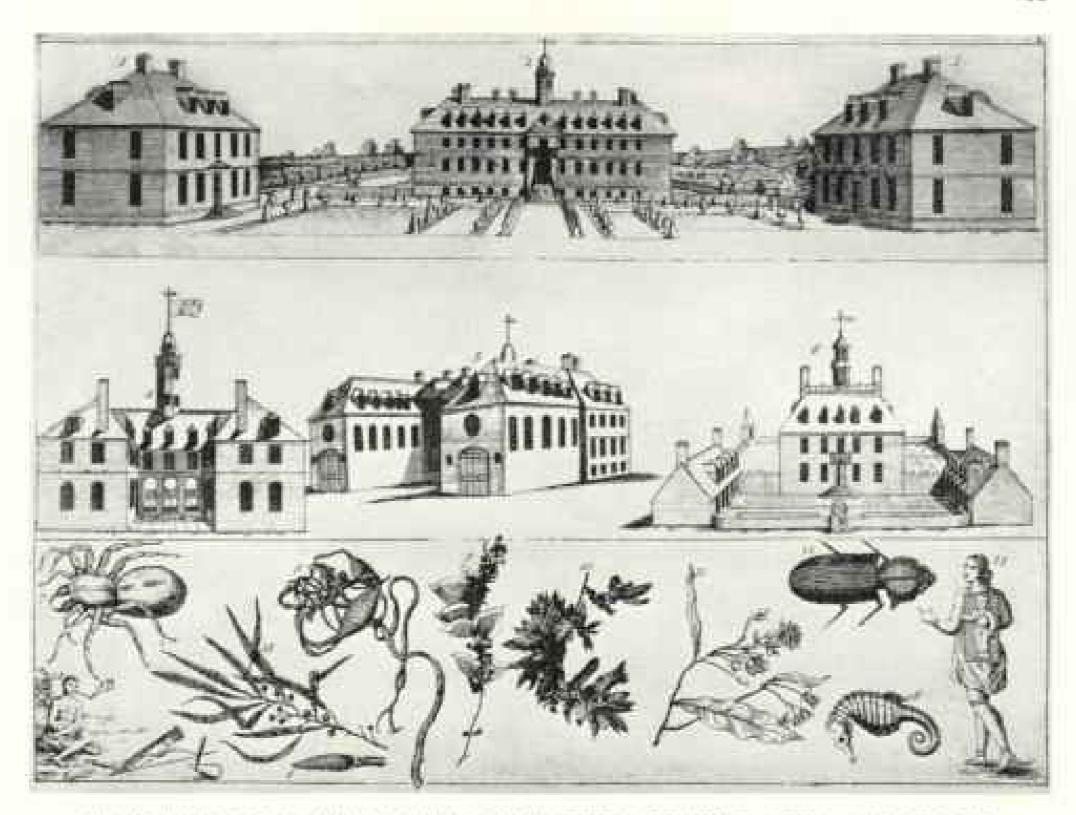
The area now included within the States of Michigan and Wisconsin was added and the Virginia claims were confirmed by the conquest, in 1779, of the Northwest Terri-

tory by George Rogers Clark.

"It has been held," says the author of A Brief and True Report . . . Concerning Williamsburg and Virginia, "that the History of the chief City of a Country is, in great Measure, the History of that Country itself. And if there be any Truth in this Philosophy, it will be left to the Reader to judge how much greater would be that Truth if the chief City should also be the only City of Consequence in such a Country: For, through those Years of the Eighteenth Century in which it was the Metropolis of the Virginia Colony, Williamsburg was not only the Seat of Virginia's Government, but also the Principal Seat of its Religion, Education, Society, Commerce, and Fashion.

"Moreover, it enjoyed this unusual Distinction in a Colony which was then everywhere acknowledged to be the most propulous, the most powerful and the most prosperous of all Great Britain's Plantations in America; so that though Williamsburg was in Virginia what Boston was in Massachusetts and what Philadelphia was in Pennsylvania, yet, due to its unusual Importance in Virginia and due to Virginia's Ascendancy among the Colonies, it was (although smaller in Size) in many Ways more potent than even those great Places."

Because this territory bordered on the American domain of the French, upon the other British colonies, upon the territory under Spanish dominion, and included within itself many Indian tribes, the



FROM THIS OLD DRAWING RESEARCH WORKERS OBTAINED CLUES FOR THE RE-BUILDING OF WILLIAMSBURG TO ITS OLD-TIME GRANDEUR

The Bodleian Library, Oxford, England, yielded one of the most valuable research finds made by the Restoration. The original copperplate, engraved to scale about 1740, gave the only extant views of the Governor's Palace (6), and the first Williamsburg Capitel (4) (Plates X and I). The plate was intended to illustrate a work on Virginia which was never published. The buildings flanking the Sir Christopher Wren building (2) are (1) the Brafferton Indian School (1723) and (3) the College President's House (1732). The sketch provided important information pertaining to the rear elevation of the Wren building (5). The panel at the bottom represents the early English idea of some of the natives and their customs, as well as flora and fauna of the New World.

colonial government of Virginia, whose capital city was Williamsburg, was in frequent commercial, political, and military relationship with its territorial neighbors.

From these contacts grew the French and Indian wars and consequent military and trade agreements. These conditions gave to the government and people of Williamsburg reasons for interest and concern in the wars of England, France, and Spain, and a cosmopolitan outlook upon world affairs.

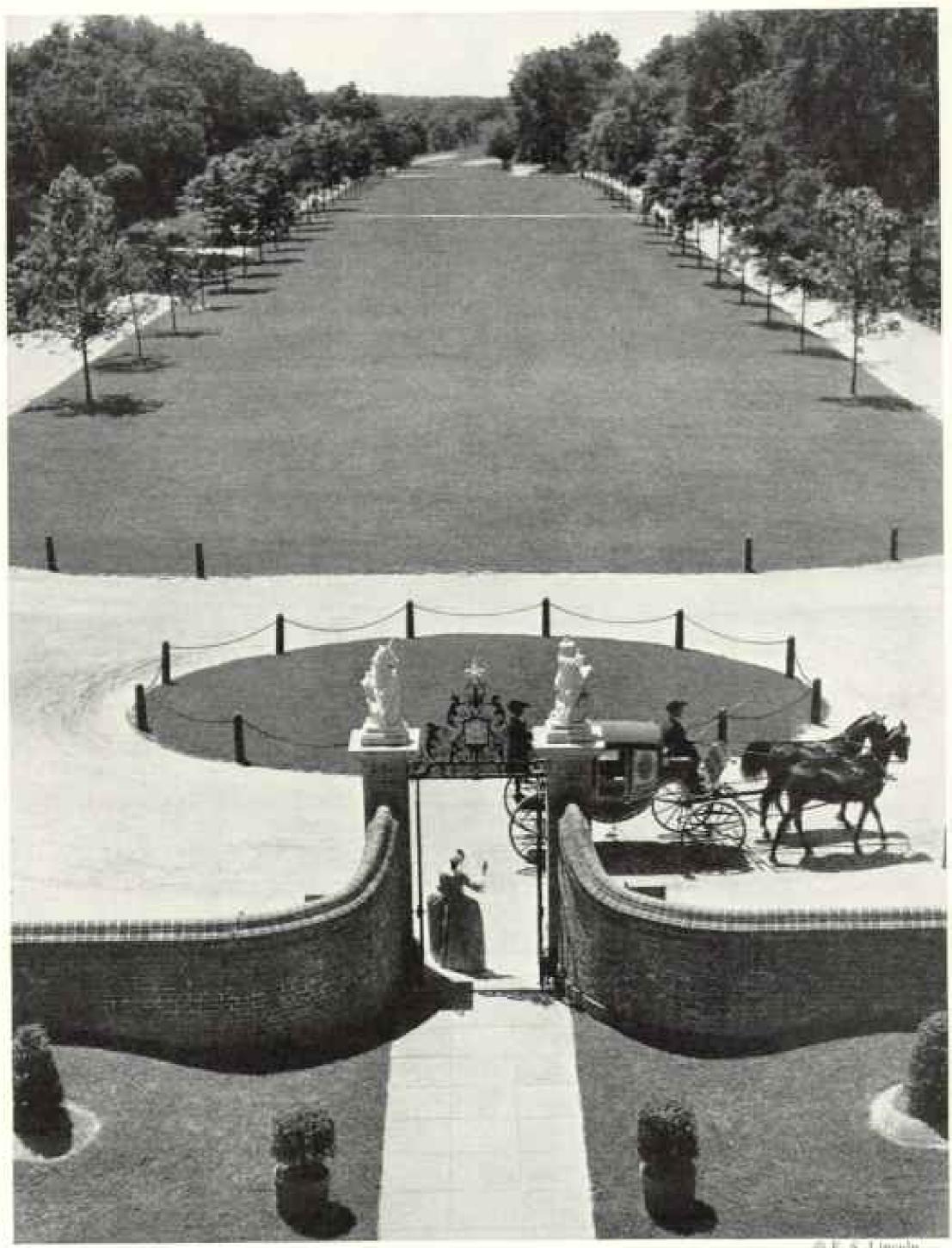
Jamestown, Williamsburg, and Yorktown, located within a radius of 20 miles upon the Virginia peninsula, which lies between the James River and the York, are inseparably united. Williamsburg was the successor to Jamestown, while the fame of Yorktown grew out of the high resolves initiated by the House of Burgesses in Williamsburg and

similar action taken in Massachusetts and the other Colonies.

These three places have recently been embraced within the bounds of the Colonial National Historical Park. Williamsburg, however, is not owned or controlled by the National Park Service. They now are being physically united by the Colonial National Historical Park Highway, which has already been built from Yorktown to the outskirts of Williamsburg and is designed to be extended to Jamestown.

THE GLORY OF JAMESTOWN

The voices which echo from deserted Jamestown, from the wilderness outposts of Middle Plantation, and from Yorktown, must be heard if the voices which speak through Williamsburg restored are to be understood.



© F. S. Lincoln

TWO SOLDIERS COULD HOLD THE GATE AGAINST MANY

To modern visitors the narrow portal in the Palace wall seems out of scale, but it was so constructed for defense (Plate XI). The Green forms the approach from the Duke of Gloucester Street. It was fined on either side by rows of trees, which have now been replaced. The circle, or turn-around, from which the original Carroll coach is drawing away (Plate II), is exactly in accordance with its dimensions as set down by Thomas Jefferson in one of his diaries (page 412).

The lone, ivy-mantled church tower at lamestown marks the beginning of the long vista through which Williamsburg must be viewed if it is to be seen in true perspective, for its glory is reflected upon Williamsburg.

Jamestown became the first permanent English settlement in America when, on May 13, 1007, the colonists landed there and named their place of settlement for

King lames.

There they built a church and later a statehouse and simple homes. There, in 1619, convened in the church the first representative legislative assembly held in the New World. There they tried communal government, which was soon followed by "starving time." There they had dealings with autocratic governors and took part in Bacon's Rebellion in 1575.

During this rebellion Jamestown was burned and Sir William Berkeley, the royal governor, who had roundly damned education, printing presses, and Bacon and his followers, made the rebellion of 1676 the prophecy of the Revolution of 1776.

"Seasoning sickness," and the abundance of other trials and discontents, culminating in the fire which in 1698 again destroyed the Statehouse, brought to a climax the thought of abandoning Jamestown for a more nearly central location for the capital of the Colony.

THE MIDDLE PLANTATION

Near Jamestown, midway between the James River and the York, was Middle Plantation, soon to become Williamsburg.

The seeds of this place had been sown by the Indians on a rampage in 1622, during which fully one-third of the English settlers in Virginia were massacred.

Consequently, at a "Grand Assembly of the Council and Burgesses holden at James City (Jamestown), in 1633, it was ordered: that a palisade be built across the peninsula from estuaries of the James River and the York" (about six miles), so that a region of safety for the inhabitants and their cattle might be secured, extending eastward to Old Point Comfort, at the end of the peninsula.

The history of Middle Plantation, so named because it was the middle plantation guarding the palisade, is obscure except for a few outstanding events which entered into the near background of the making of Williamsburg and its subsequent fame.

Here Bacon's followers met to organize

the rebellion of 1676. This military uprising had its origin in the determination of the young Nathaniel Bacon and his followers to protect their homes from attacks by the Indians. The government objected to such military defense because of its financial interest in the Indian fur trade.

At Middle Plantation in October, 1677, with Jamestown lying in ashes, a Grand Assembly was held. About this time certain inhabitants of York County filed a petition with the King's Commissioners in which they offered the following supplication: "And if a Towne be built for the Governor, Councill and Assembly to meet and for the General Court, we humbly propose the Middle Plantation as thought most fit, being the center of the country and also within Land most safe from foreign shipping, any place upon the River Side being liable to the Battery of their greatt Gunns.

SECOND COLLEGE IN THE UNITED STATES

Meanwhile, Middle Plantation had been chosen as the site of the second college in what is now the United States (Plate VIII and page 408).

The College of William and Mary was destined to play a dominating part in the history of Virginia, in the establishment of Williamsburg as the second capital of colonial Virginia, and in the culmination of the thought of the restoration of Williamsburg.

Next to Harvard, established in 1636, William and Mary is the oldest institution of higher learning in the United States, and the first college founded under royal charter.

In 1693 the Reverend Dr. James Blair, Commissary in Virginia of the Lord Bishop of London, and also minister of the church at Jamestown, obtained from King William and Queen Mary the royal charter for the building of the College of William and Mary in Virginia. The General Assembly ordered: ". . . that Middle Plantation be the place for erecting the said college of William and Mary in Virginia and that the said college be at that place erected and built as neare the church now standing in Middle Plantation old ffields as convenience will permitt....

And so the College was set down near the church and its location largely determined the site and plan of the future city of

Williamsburg.

Its main building is known from contemporaneous evidence to have been designed by Sir Christopher Wren. It housed the



D.F. S. Lincoln.

BENEATH THE WEEN BUILDING CHAPEL SLEEP THE COLONIAL GREAT

Lord Botetourt, Sir John Randolph, John Randolph the "Tory," and Peyton Randolph, first President of the Continental Congress, are buried here. When the restoration began, the original arrangement of this chapel, where many generations of students of the College of William and Mary have attended services, had been altered, but it now appears as it did in colonial days,

professors and students and contained the kitchen, dining room, and great hall. A chapel was added in 1732 (above).

The College became the alma mater of three Presidents of the United States, Jefferson, Monroe, and Tyler; of George Wythe, first college professor of law in the United States (Plate VII); of Chief Justice John Marshall, and of many other distinguished patriots and statesmen.

Every aspect of Washington's public career began in Williamsburg.

He was not a student at William and Mary, but he came to the College to take

the required examination before the professor of mathematics and to be commissioned a county surveyor. This marked the beginning of his public service.

During the last years of his life he was chancellor of the College. As a young man he was commissioned by Governor Dinwiddle to service in the French and Indian wars, which was the beginning of his military career; as a representative of his county he served for many years in the House of Burgesses, which was the beginning of his political career, and he was sent by that body as a delegate to the Continental Congress. He married Mrs. Martha Custis, who had a residence in Williamsburg.

On December 5, 1776, the Phi Beta Kappa Society was founded by students of William and Mary.

> THE IRE OF COVERNOR NICHOLSON

In 1699, the capital of colonial Virginia was movedfrom Jamestown to Middle Plantation, which, because of this decision, was soon to become Williamsburg. The government was installed in the College where, pending the building of the new capitol, the General Assembly held its meetings.

It is recorded that "His Excellency Governor Nicholson also had his residence at the College for some time, which lent no small distinction to the institution. Yet

it is to be questioned whether His Excellency's influence upon the scholars was of the best; for, on one occasion at least, being approached in the halls of the College by one seeking money out of the public funds, the Governor did fly into such a rage and did curse and swear so loudly, that a sea captain, who lay asleep at some distance in the building, sprang from his bed and, neglecting to affix his wooden leg, came leaping through the halls in his shirt, thinking the building to be afire." *

In calmer moments Governor Nicholson



Phomaraph by Edwin L. Wisherd

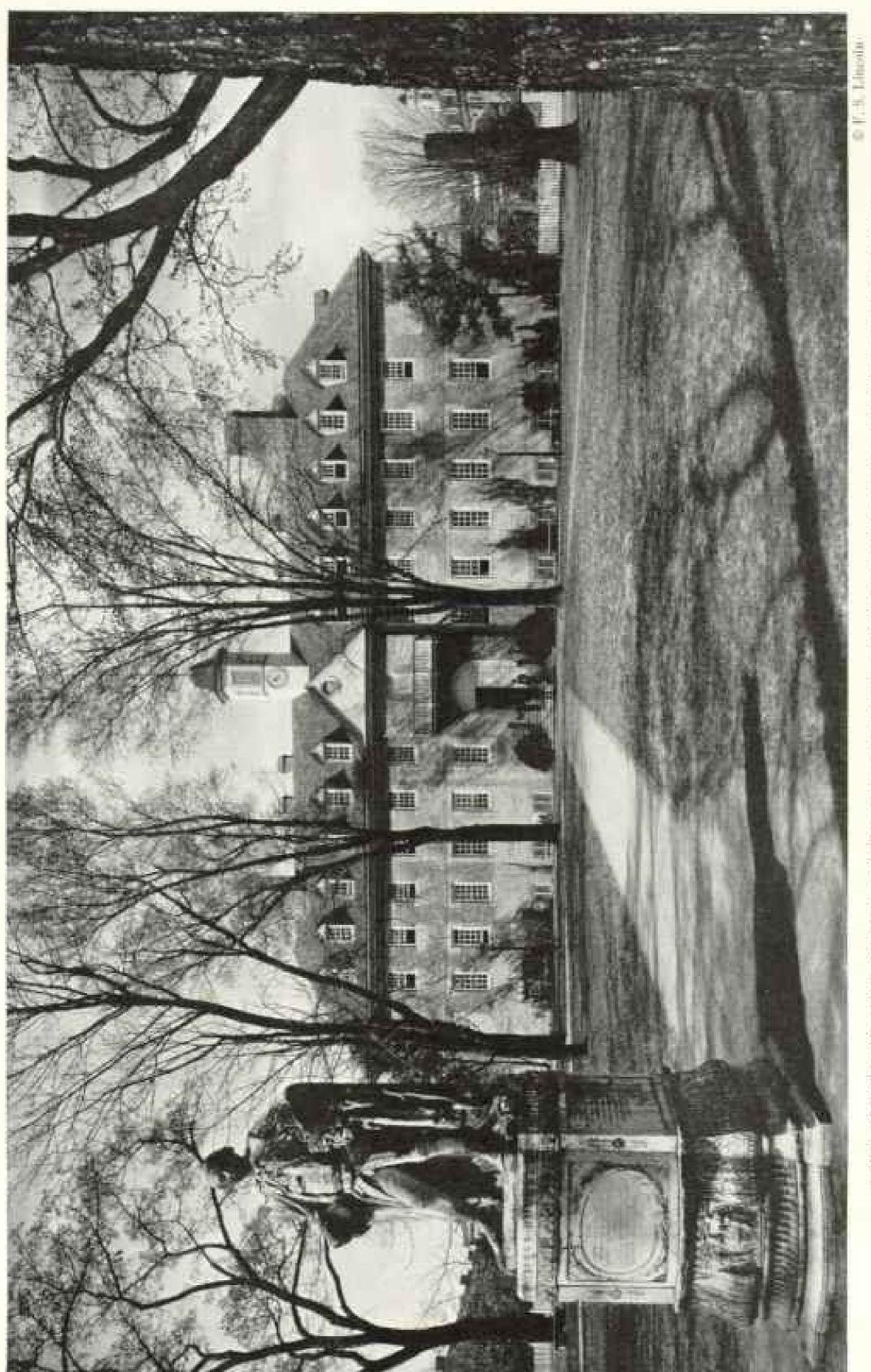
THE PILLORY GAVE PETTY CRIMINALS A PORETASTE OF HANGING

It may also have served in place of the whipping post, though when it was so used the victim would probably have been stood in a barrel to prevent his kicking the wielder of the lash. Recently one William and Mary student editor. who had his picture taken in such duress, well-nigh strangled before the "guoler" came to release him.

> was soon to have the city of Williamsburg laid out and carefully planned, according to the Act of the General Assembly, as the second capital of the Colony of Virginia,

> Lord Cornwallis came to the College and occupied the President's House, erected in 1732, while on his way to entrench and later to surrender himself and his army at Yorktown. Officials of the medical staff of the French Army were quartered in this same house while taking care of the

> * See "A Brief and True Report . . . Concerning Williamsburg in Virginia," by R. G., Gent,



EFORE THE WREN BUILDING OF THE COLLEGE OF WILLIAM AND MARY LORD BOTHTGURT NOW STANDS

Even during the Revolution an admiring Assembly Once the statue of the popular colonial royal governor was in the Piazza of the Capitol (Color Plate V. right). Even during the Revolution an admiring Assembly coprinted funds for cleaning this memorial to a British peer who had undeared himself to the colonists by fair and generous consideration of their right. Flugh Jones, professor of mathematics at the College of William and Mary and a confemporary of the famous architect, wrote of this atructure in 1712: "The Building is beautiren, adapted to the Nature of the Country by the Gentlemen there. appropriated funds for cleaning this memorial to a British peer first professor of mathematics at the College of William and M ful and commoditous, being first modelled by Sir Christopher W



In the room of which this is a duplicate, the House of Burgesses, the oldest representative legislative body in North America, convened from 1704 until 1747, when the fire and again occupies its accustomed place. IF AN EARLY SPEAKER OF THE HOUSE OF BURGESSES RETURNED TODAY, HE WOULD FIND HIS OWN CHAIR AWAITING HIM



Photograph by Edwin L. Withord

IN THIS JAIL GRIM PUNISHMENT OVERTOOK ONE ACCUSED OF PURCHASING SCALPS

Captured at Vincennes, Indiana, by George Rogers Clark, Henry Hamilton, Tory governor of the Northwest, known as "The Hair-buyer," was imprisoned here because he incited the Indiana against the colonists. Charged with offering bounties for white persons' scalps, he languished for months in a similar unheated, unglazed, and unfurnished cell in the Public Gaol during the Revolution (page 415). Many prisoners were locked in a single room and were further secured with handcuffs and leg from, riveted on.

wounded French soldiers brought from the battlefields of Yorktown to be hospitalized in the Wren building at the College. During this time the College President's House was accidentally burned. The cost of repair was paid from the general fund of the French Army.

Today William and Mary has a faculty of 86 and a student body of more than 1,200.

It was about 150 years after this that Mr.

John D. Rockefeller, Jr., visited Williamsburg, because of certain events of special interest connected with the College. In 1925 a dinner was given in New York City by the United Chapters of Phi Beta Kappa Society to stimulate interest in the plan to erect on the campus a memorial hall to the fifty founders of this society.

At the dinner an address was given on "The College of William and Mary and its Historical Environment." Mr. Rockefeller was present.

MR. ROCKEFELLER VISITS WILLIAMSBURG

After the dinner an invitation was extended to him to visit Williamsburg and this, at a vast, but at that time unforeseen, cost to himself he accepted. He came the following year, viewed the city and its nearby points of interest, was introduced to the

ghosts of the past, and given glimpses of restoration possibilities.

Mr. Rockefeller returned in 1926 to be present at the dedication of the Phi Beta Kappa Memorial Hall and at that time confidentially authorized the preparation of tentative plans showing what might be done to restore the Wren building at the College, the walls of which had in large measure withstood three devastating fires.

He further confidentially authorized the



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HERE SLEEP SOLDIERS OF THE REVOLUTION

One hundred and fifty-six men of Washington's army, and two women, possibly nurses, lie buried in the Palace garden. The willow tree stands in the center of their burying ground, which had lain forgotten for more than a century. The graves were discovered when the estate was being restored. The Palace served as the hospital for the Continental troops during the Siege of Yorktown.



Photograph by Edwin L. Wisherd

WITHOUT COLUMNS, THE OLD COURT HOUSE IS PAITHFUL TO TRADITION

Pillars were probably intended for the building, which was crected at Williamsburg in 1770, but a sea accident, perhaps, or the rigors of the Revolution, prevented their being supplied. Some were added after a fire in 1911; however, the Restoration took them down. This edifice now contains the archeological exhibit (page 416).

preparation of preliminary drawings to help visualize the possibilities of the dream of a Williamsburg restoration. No further commitments of any kind were made or suggested at that time.

This momentous visit brought the restoration thought to the point which Governor Nicholson had reached in 1699. Plans had to be prepared. Nicholson's plans were for building a colonial capital city; now they were plans to visualize its possible restoration after the lapse of 227 years.

COLONIAL CITY PLANS

The plans of Nicholson's time were slightly delayed by the Governor, who, according to tradition, suggested that the city be planned about a monogram of W and M in honor of King William and Queen Mary. The tops and bottoms of this monogram plan, however, ran inevitably into two neighboring ravines.

This plan, therefore, gave place to another on which the main thoroughfare, extending from the College at the west end, and the Capitol site at the east, was named the Duke of Gloucester Street in honor of His Highness William, Duke of Gloucester.

The two parallel streets on either side were named "Francis" and "Nicholson," for the Governor himself. The other streets were named then, or later, for the Kingdoms of Great Britain or in honor of people of distinction in England.

Near the center of the city spacious greens were laid out. One of these, extending north from the Duke of Gioucester Street by the parish churchyard, was planned as the foreground green and entrance to the Governor's House, subsequently to be called the "Palace" (Plate X and page 404). Near the center of the town was a spacious open green designated Market Square.

The plan for the city and the directions for building the Capitol, and the orders governing the erection of houses, were clearly set forth in minute detail in the Act of the General Assembly. This Act was of



Photograph by Newton V. Blakesler

LORD DUNMORE'S REMOVAL OF POWDER FROM THIS MAGAZINE KINDLED THE REVOLUTION IN VIRGINIA

After the surrender of Cornwallis it was used successively as a stable, church, dancing school, and, during the Civil War, as a Confederate arsenal (page 415).



Photograph by Edwin L. Wishard

OVER PIPE AND BOWL BURGESSES TALKED REVOLUTION

The bartender of Raleigh Tavern could drop the portcullis-like gate above the bar upon leaving his post with no fear that customers might reach for a drink (Plates II, III, and page 416).



@ F. S. Lincoln

PLEACHED ARBORS OF BEECH DEFY THE SUN

Hot summer days were passed pleasantly in the shade of unsupported tunnels of trees, which flanked the ballroom garden of the Palace. Eventually the temporary wooden forms used by Restoration workers will be taken down, and the trees will continue to grow in arches as in colonial times.

indispensable help in preparing the plans for the restoration.

There has been no occasion, except by enlargements of the colonial city, for altering this colonial plan during the two centuries and a quarter and more since colonial Williamsburg was built. Along the streets and facing the greens then laid out were erected the public buildings and private homes of the city.

"SIT DOWN, MR. (GEORGE) WASHINGTON:"

The Capitol was completed in 1705, burned in 1747, rebuilt in 1751, and burned and abandoned in 1832. In this building met the Virginia Council, the Burgesses, the General Court, and later the Government of the Commonwealth, until the seat of government was removed to Richmond in 1779.

At the Capitol Patrick Henry made his "Caesar-Brutus" speech and offered his resolutions against the Stamp Act (Plates I and IV). Here the first steps were taken looking to the union of the Colonies. Here the resolutions were offered, and unanimously adopted, calling upon the Continental Congress to declare the Colonies free and independent.

Here was adopted George Mason's Declaration of Rights, and the first written constitution of a free and independent State, and here Washington was publicly thanked for his gallant service in the French and Indian wars.

Being overcome by embarrassment when he rose to reply, Washington was addressed by Speaker Robinson, who said: "Sit down, Mr. Washington. Your modesty is only equaled by your valor, which surpasses any eloquence which I possess."

TACKS AND TABLES

The Capitol of 1699-1747 bas been rebuilt and completely furnished according to the original specifications, which were specitic to the extent of directing the material to be used in covering benches and the kind of tacks that were to affix and ornament the The ditape. mensions of the tables were specified.

The portraits then mentioned have been replaced by origi-

nals of the period and others added, including Charles Willson Peale's life-size likeness of General Washington. Books and documents, appropriately placed, give to the Capitol an atmosphere of authenticity.

Upon the completion of its restoration the General Assembly of Virginia held a formal session of the Legislature in the building on February 24, 1934. The State Supreme Court of Appeals and the Governor of Virginia were officially present and took part in the proceedings. Mr. Rockefeller, upon invitation of the General Assembly, addressed the joint session in the hall of the House of Burgesses.



© F. S. Lincoln

BURGED STEPS CLEARLY ESTABLISHED THE FALL OF THE ORIGINAL TERRACES

The Palace burned in 1781, and its gardens fell into disuse. Excavation uncovered parts of a stairway of precisely this character leading to the "canal." Enough fragments were intact to guide the rebuilding of the terraces and the stairs.

> The Public Gaol was erected in 1701 near the Capitol. This building, the ruins of which were still standing, has been restored. Here Blackbeard's pirates were imprisoned before being hanged. To this prison also was brought General Henry Hamilton after Fort Vincennes, which he commanded, was captured by George Rogers Clark during the Revolution (page 410).

> The Public Magazine was built upon the Market Square during the administration of Governor Alexander Spotswood in 1714, for the storing of "All the Arms, Gunpowder and Ammunition, now in the Colony, belonging to the King." The removal of the

powder from this magazine on April 20, 1775, the day after the Lexington-Concord battle in Massachusetts, precipitated the Revolution in Virginia.

This building, in a dilapidated condition, was still standing when the restoration began. Its encircling high wall had been torn down a number of years previously and the bricks used for a church,

The building has now been restored and the encircling wall rebuilt (page 413). It is owned and kept open by the Association for the Preservation of Virginia Antiquities, which was a pioneer society for preserving sites and buildings in Williamsburg and in Virginia prior to the restoration endeavor.

FIRST THEATER IN THE UNITED STATES:

Levingston's playhouse, the first theater in the United States, was built in 1716 near the Palace Green. Near by was laid out a bowling green (Plate XIII). The site on which this building stood is owned by the Restoration, but as yet the theater has not been rebuilt.

Here plays, some Shakespearean, given under the patronage of the Governor, provided popular entertainment and diversions for the people. The emperor and empress of the Cherokee Nation attended a performance of "Othelio" at Williamsburg's second theater, built near the Capitol in 1751. The Indian queen was so alarmed by the fighting on the stage that, it is related, she sent one of her attendants to prevent the actors from killing each other.

The Raleigh Tayern was erected prior to 1742 (Plates II and III and page 413). Burned in 1859, it has been rebuilt by the Restoration upon its original foundations, after its original form, and handsomely furnished with antiques of the period in accordance with colonial inventories listing the furniture that was in the building.

Colonial Williamsburg abounded in taverns and ordinaries. They were well patronized, as they ministered not alone to those in attendance upon the government, but to visitors to the city, which was the commercial and social center of the Colony,

Among the taverns the Raleigh stood preeminent—it was one of the most noted taverns in colonial America and was said by travelers to compare favorably with the best in England.

Here the royal governors were officially banqueted upon their arrival from England; here Washington, according to his diary, frequently dined; here Jefferson danced with his "fair Belinda"; here the Burgesses, when dissolved for disloyal utterances prior to the Revolution, met to carry on; and here, in the Apollo Room, the Phi Beta Kappa held its anniversary celebrations.

SIFTING FORTY TONS OF ARTIFACTS

The old Courthouse, built in 1770, has been restored and is used as the archeological museum and information center of the Restoration (pages 412, 432). It contains specimens of colonial glass, tableware, hardware, household utensils, and building materials, selected from some forty tons of such specimens of 17th- and 18th-century artifacts dug up while excavating the foundations of colonial Williamsburg houses.

These exhibits have been of valuable assistance to the architects and others responsible for the building, interior decoration, and furnishing of colonial houses, and constitute one of the most convincing proofs of the authenticity of the restoration.

The colonial Virginia Gazette office was erected for printing a paper which began its valuable work of disseminating "the freshest advices, foreign and domestick" in 1736. It has been one of the most valuable sources of historical information related to the problems of the Williamsburg restoration.

At its office in colonial days books were printed and sold, and there, for some time, the colonial post office was established. This building, which was burned, has not yet been rebuilt.

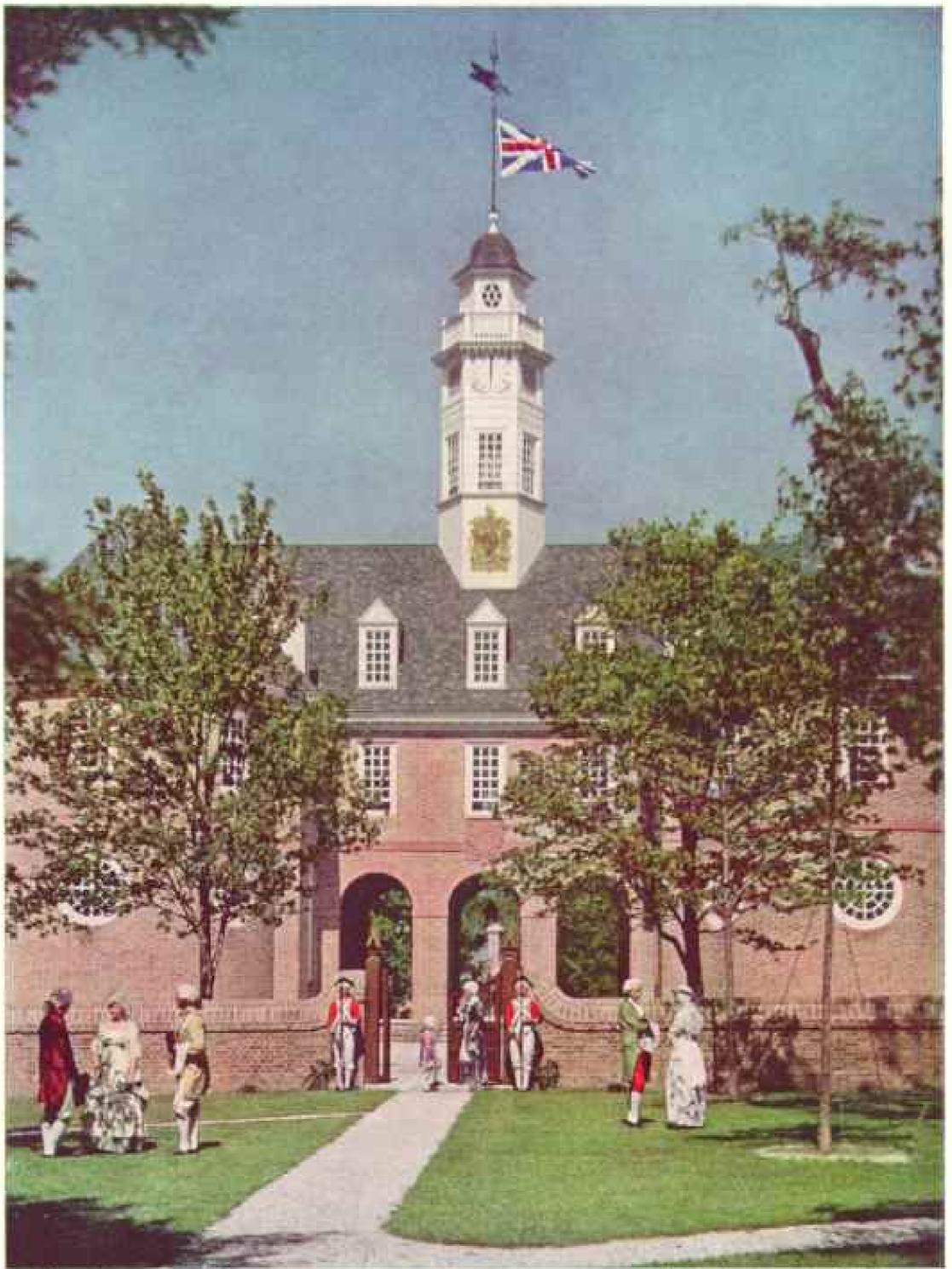
BRUTON, COURT CHURCH OF COLONIAL VIRGINIA

Bruton Parish Church is the successor to the church which was built soon after Middle Plantation "was laid out and paled in." In 1683 a new church built of brick was crected to take the place of "the old church" in this place (Plates VII, XV, and page 428).

After the seat of government had been established in Williamsburg a new church was built by the united efforts of the parish and the General Assembly in 1715, the Colony building "the wings and intervening part" and providing pews for the Governor, the Council, and the Burgesses. Thus Bruton became the official "court church of colonial Virginia."

Bruton inherited the Jamestown traditions, its Communion silver and its minister,

VIRGINIA'S COLONIAL HERITAGE



*TF THIS BE TREASON, MAKE THE MOST OF IT!" CRIED PATRICK HENRY ON THIS SITE

In 1765 the young Virginia statesman inveighed against the Stamp Act with, "Caesar had his Brutus, Charles the First his Cromwell, and George the Third... may profit by their example." George Washington, George Wythe, George Mason, Thomas Nelson, and other Revolutionary statesmen sat in the Virginia House of Burgesses, in the old Williamsburg Capitol, which stood here. It was built in 1699-1705, destroyed by fire, and rebuilt half a century later, again burned in 1832. Sponsored by Mr. John D. Rockefeller, Jr., the restoration erected this building on the original foundations according to specifications of the first structure (see Color Plate IV).

THE NATIONAL GEOGRAPHIC MAGAZINE



Owned by the Carroll family of Virginia, this coach was made before the Revolution. It has been repaired, lined, and repainted with the same care used in restoring the colonial buildings.



National Geographic Society

Finlay Photographs by Luis Marden

THERE IS ONE CUSTOM THAT TIME HAS NOT CHANGED

Forbears of the pickaninnies who are up to their ears in watermelon probably received a similar treat from the soldiers of the Kevolution. Costumes donned by the two men for this picture are of the very late Revolutionary period. In the Williamsburg restoration attendants in all of the exhibition buildings wear colonial dress.

VIRGINIA'S COLONIAL HERITAGE



Finlay Photograph by Luis Marden

THE COUNCIL OF THE COLONY OF VIRGINIA WAS SUPPLIED WITH "RED TAPE" Six pieces of it, used for tying documents, together with "brass candlesticks, sauffers and sauff dishes, pen knives, recording ink" were ordered by Auditor William Byrd in 1705 for the lawmakers,



National Geographic Society

Finlay Phote raph by Edwin L. Wisberd

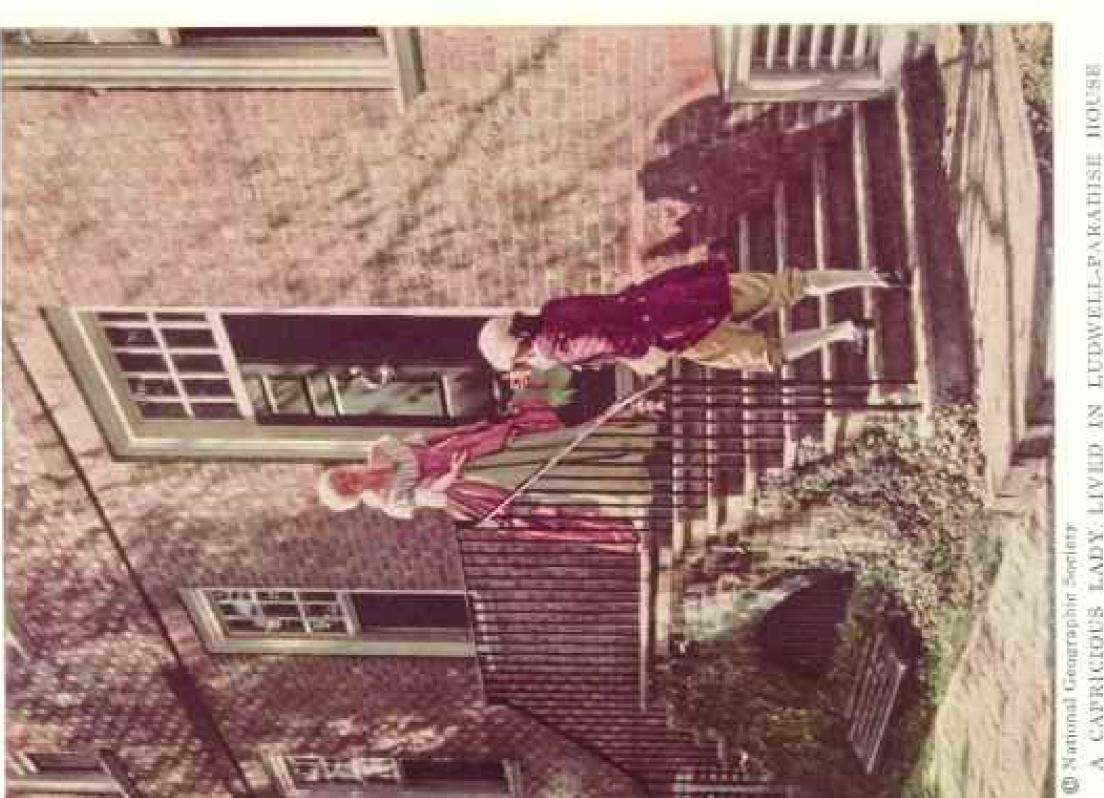
HERE, IN RALEIGH TAVERN, JEFFERSON DANCED WITH HIS "FAIR BELINDA"

In the Apollo Room, beside a mantel bearing in Latin the inscription, "Jollity, the Offspring of Wisdom and Good Living," students of William and Mary held carnival, Phi Beta Kappa had its banquets, and Burgesses met. The restoration has re-created accurately the building which, when it burned in 1859, had been a social center in Williamsburg for more than a century.



at Jamestown, it was constructed without chimneys, but in 1723 two were added on the clerk's unctions S CHAIN as close to it as their colonial lady ancestury were permitted, complaint that the records were "exposed by the damps," The the three girls strolling along the walk in costume are probably which were sometimes held in the building. The trees in the fo Successor to the State Houses which had burned

n the foreground are paper mulberries,



A CAPRICIOUS LADY LIVING IN LUDWELL-PARAL

Lucy Ludwell Paradise, madeap widow from London, used to have ber-callers ride through the halls of this home in a coach. The building, soundly constructed before 1717 by Philip Ludwell 2d, a founder of Williamsburg, has been little aftered, and was restored without difficulty.



A COLONIAL DAME MIGHT HAVE DEEN TRIED IN COURT Philay Photographs by Luis Macden

SUCH

She should not have been coming out of the south archway of the rapidly (Plate IV). The iron railing surrounds the restored base on which stood the statue of Norborne Berkeley, Baron de Botetourt, best beloved of the Royal Governors.

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Finlay Photograph by Edwin L. Wisherd

WILLIAMSBURG PRIVATE GARDENS DELIGHT FLOWER LOVERS

Great care has been exercised in restoring this feature of the homes. The garden shown here belonged to John Custis, father in law of Martha Washington, who erected a "tenement," or house to rent, on the Duke of Gloucester Street.



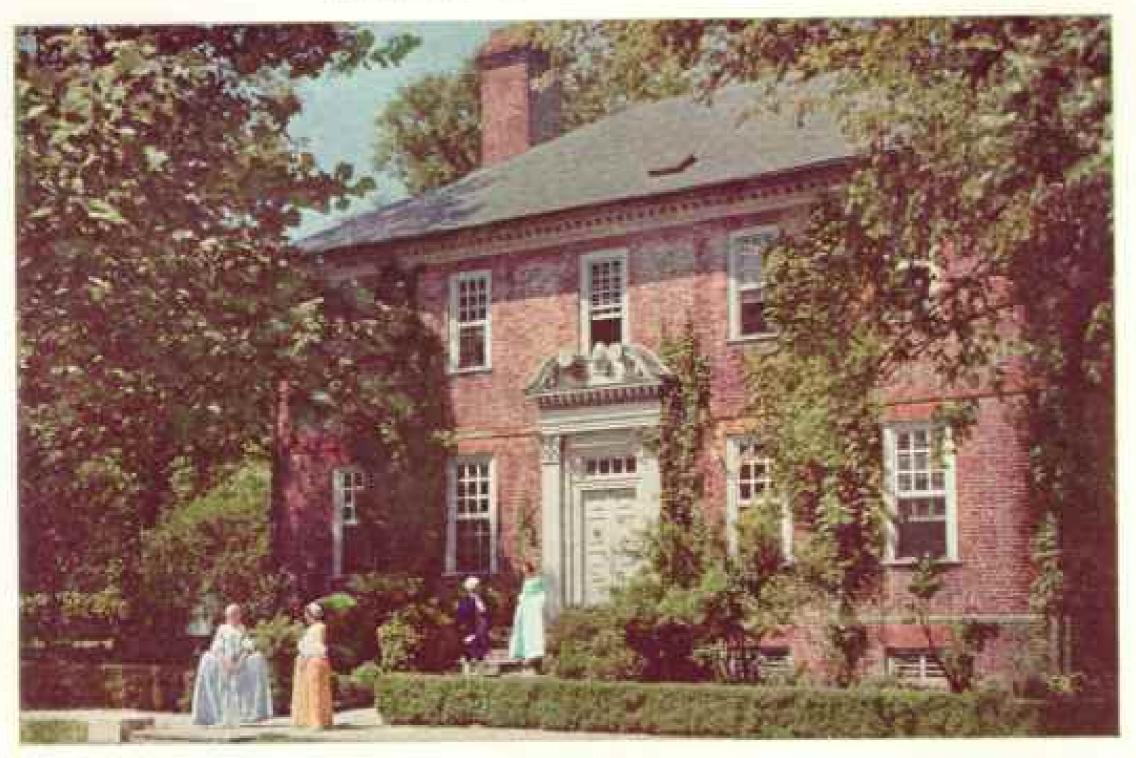
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Pintay Photograph by Willard R. Culver.

COLONIAL GOVERNORS' CHILDREN PLAYED BY THE PALACE FISHPOND

Rebuilding of the dam restored this informal corner of the grounds to its original appearance. The path leads around the canal and tiny lake through trees and shrubbery of a kind and arrangement faithful to the old records.

VIRGINIA'S COLONIAL HERITAGE



HERE LIVED GEORGE WYTHE, TEACHER OF AMERICA'S GREAT

John Marshall, Thomas Jefferson, James Monroe, and many others studied under the first college professor of law in America. The statesman was a signer of the Declaration of Independence. Washington made the house his headquarters before the siege of Yorktown.



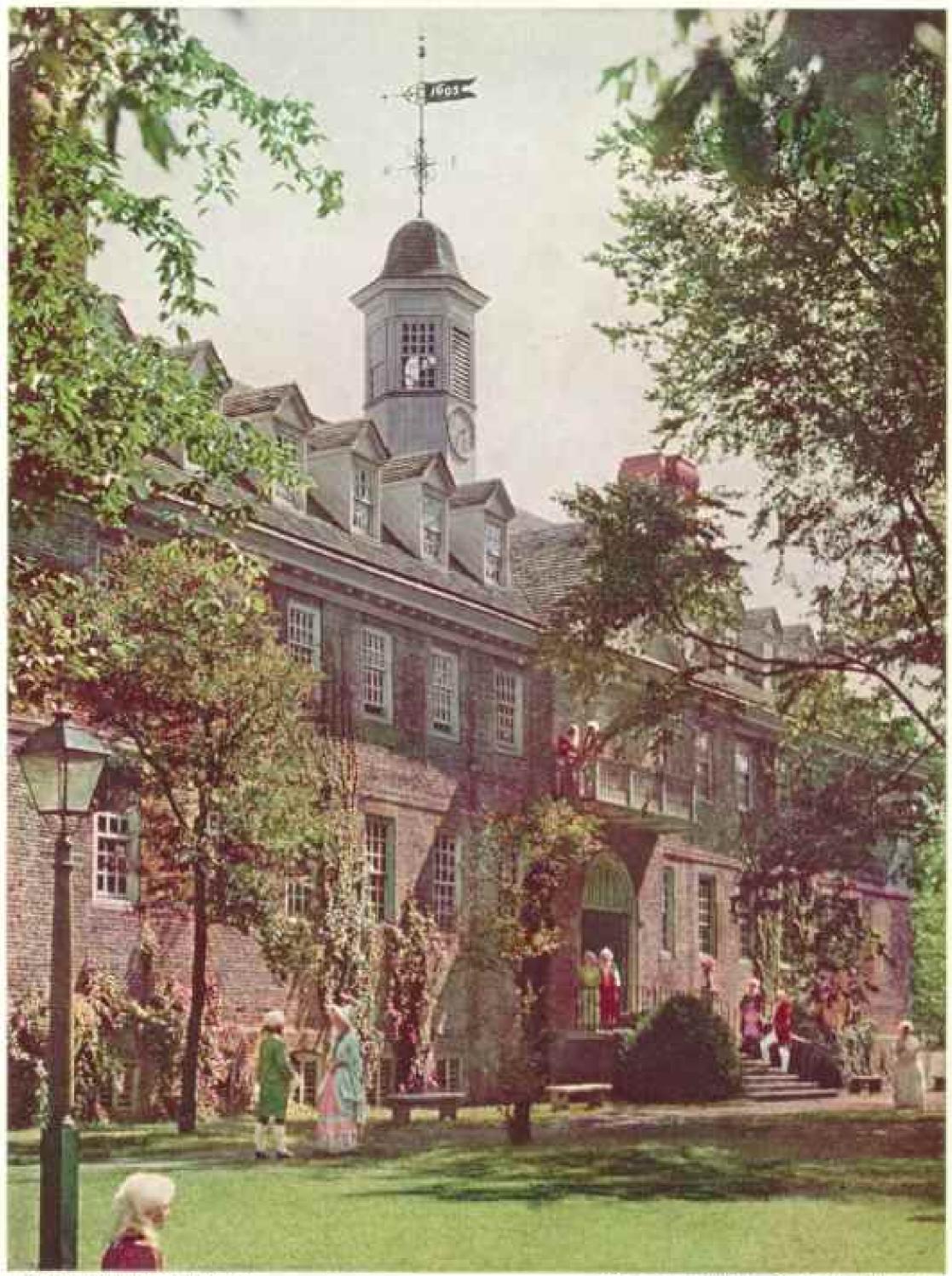
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Dufaycolor Photographs by Edwin L. Wisherd

THE GOVERNOR OCCUPIED THIS ROOMY PEWS STUDENTS WERE GALLERY PRISONERS

Bruton Parish Church was attended by the young men from William and Mary; and just to make sure they stayed out the service their superiors had them locked in (Plate XV). Jefferson may have conceived here some of his ideas for his "Statute of Virginia for Religious Freedom,"

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Finlay Pinitugraph by Newton V. Blakeslee

SIR CHRISTOPHER WREN DESIGNED THIS, THE OLDEST ACADEMIC BUILDING IN THE UNITED STATES

The great British architect drew the plans for the main building of the College of William and Mary. Besides its use for education, the edifice served as a meeting place for the General Assembly during construction of the Capitol and as the main hospital of the French in the course of the siege of Yorktown. It has been damaged by three fires, but its outside walls are largely original. Bringing this structure identified as the work of the creator of St. Paul's Cathedral in London, back to its colonial appearance was one of the first major projects of the Williamsburg restoration.

the Reverend Commissary Blair, founder and first president of the College of William and Mary (page 405).

The partial restoration of Bruton Parish Church in 1904-07 represents the beginning of the thought of the restoration of colonial

Williamsburg.

In 1907 a lectern was given by President Theodore Roosevelt, commemorating the 500th anniversary of the permanent establishment of the English Colony at Jamestown. A beautiful Bible, given by King Edward VII, commemorating the 300th anniversary of the establishment of the English Church in America, was presented at the same service by the Lord Bishop of London.

Statesmen of colonial Virginia, associated with the government in Williamsburg from 1715 to 1779, worshiped in Bruton Parish Church. Washington's name occurs many times on the parish register in connection with the baptism of his slaves. This old register dates back to 1662.

"THE PALACE" SO NAMED BECAUSE OF ITS COST

The Palace of the colonial royal governors was ordered built in 1705, but was long in construction because it was too ornate and expensive easily to win the lavish appropriations from the General Assembly necessary to finish it. Governor Spotswood brought it to completion about 1720 (Plates X, XI, XII, XIV, XVI, and page 404).

Because of the frequency and size of these appropriations, the Assembly became convinced that the building deserved the

name of "palace," and so called it.

All of the colonial governors of Virginia, from Spotswood to Lord Dunmore, resided there, as did Patrick Henry and Thomas Jefferson, the first two governors of the Commonwealth.

A part of its spacious gardens became a burial place for the soldiers of the American Army of the Revolution while the Palace was being used as a hospital during the

Siege of Yorktown (page 411).

Hugh Jones in his Present State of Virginia, published in 1724, speaks of the Palace as ... a magnificent Structure, built at the publick Expense, finished and beautified with Gates, fine Gardens, Offices, Walks, a fine Canal, Orchards . . . This likewise has the ornamental Addition of a good Cupulo or Lanthorn, illuminated with most of the Town, upon Birth-Nights and other Nights of occasional Rejoicings."

The restoration of the Governor's Palace and the spacious grounds and beautiful gardens, including the canal, has been the climax of restoration endeavor.

The finish of its interior woodwork, its exquisite interior decoration, the surpassing beauty of its varied terraced gardens, its display of boxwood and holly hedges and of crape myrtle and other flowering trees and seasonal flowers, among which roses abound, constitute fitting symbols of what was most tasteful and ornate in colorful colonial Virginia (Plates VI and IX).

Within recent months the furnishing of the restored Palace has been nearly completed. An extensive collection of contemporary furniture and paintings has been obtained in England. These match the descriptions of the furnishings in every room given in the inventories of the colonial governors.

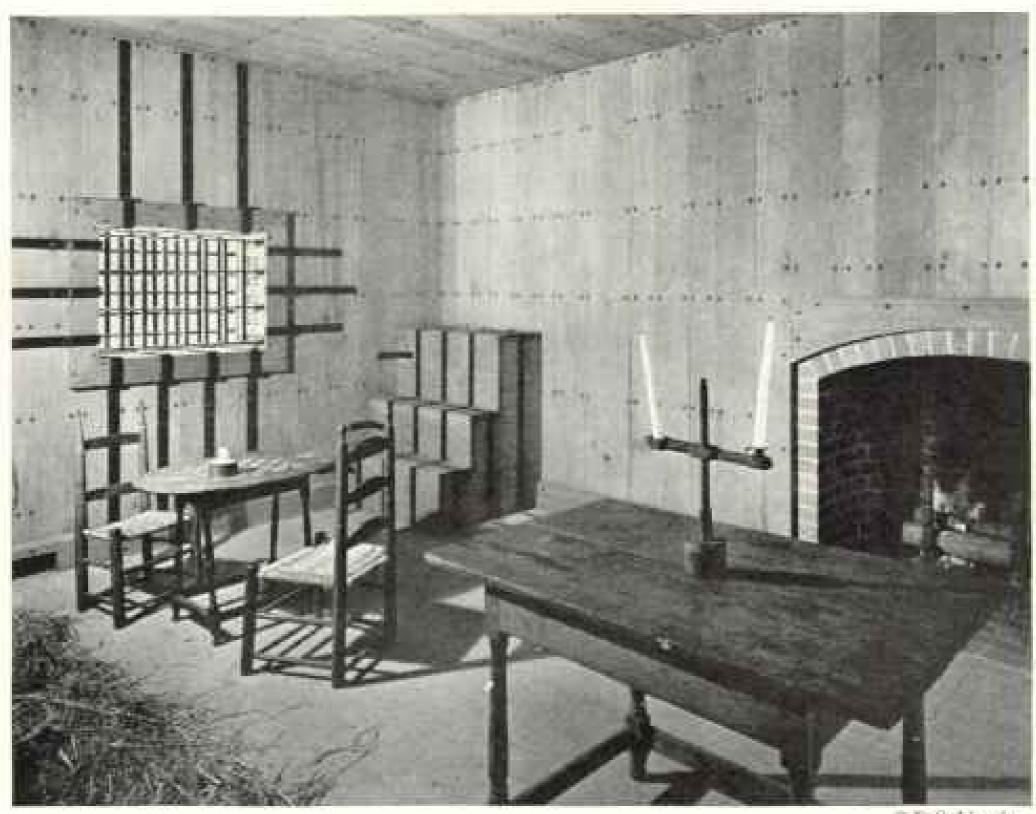
The restored homes of colonial Williamsburg are many and varied. They are surrounded by re-created gardens and face upon old greens and historic streets. Some are held under life-tenure agreements graciously allowed. A few will be opened as exhibition buildings. All of them add to the making of the harmony and scale of the city restored, and to the completion of a colorful picture of a memorable past.

THE FIRST COLLEGE PROFESSOR OF LAW

The Wythe House was the home of George Wythe, first college professor of law in the Colonies, teacher of Jefferson, Monroe, and Marshall, and of other notable statesmen. Wythe was a Signer of the Declaration of Independence (Plate VII).

with the aid of Chapter III, Colonial Dames of America, when fast falling into decay. Thus, its preservation was secured and Bruton Parish Church, adjoining, protected. While this restoration was in progress under direction of the Rector of Bruton, Mr. William G. Perry, of the firm of Perry, Shaw, and Hepburn, of Boston, visited Williamsburg on a vacation study of the colonial architecture of Virginia. Dropping in at the Wythe House, he sensed the need for counsel and kindly gave helpful advice.

This acquaintance later led to the selection of Mr. Perry and his associates as the architects of the Williamsburg Restoration. In this house, and probably in the room which had been occupied successively by Washington and Rochambeau during the Yorktown campaign, the preliminary



D F. S. Lincoln

IMPRISONED DEBTORS WERE PAMPERED IN COLONIAL VIRGINIA

When a new house for the gaoler was added to the Public Gaol at Williamsburg, his old quarters, fireplace and all, were assigned to those who were forced to serve time for nonpayment of their bills. Criminal offenders enjoyed no such comforts (illustration, page 410). The room was sheathed with heavy oak boards. Even the steplike convenience in the corner was strongly re-enforced with iron and built so that it was escape-proof.

sketches, showing the possibilities of the restoration of the Wren building at the College, and of colonial Williamsburg, were first shown to Mr. Rockefeller, on May 21, 1927.

The Wythe House is soon to pass from the church to the Restoration.

WHY WILLIAMSBURG WAS CHOSEN FOR RESTORATION

This city, so rich in historic association and time-encrusted beauty, offered the one feasible opportunity to reclaim and restore a colonial center.

Of four cities pre-eminently important in America's early history, and especially potent in shaping pre-Revolutionary thought which led to the establishment of our Republic, Williamsburg alone seemed to lend itself to such a project.

Obviously, an area a mile long and approximately a half mile wide could not have been secured for restoration of colonial Boston with Faneuil Hall as its center; nor in colonial New York with old Trinity Church as its center; nor in colonial Philadelphia around Independence Hall.

In Williamsburg there still stood about 95 colonial buildings of various kinds within a relatively small area, largely surrounded by an unspoiled countryside.

SECRECY ESSENTIAL TO EARLY STAGES

At the outset complete secrecy was essential to the success of the Restoration endeavor. The preliminary plans were made from measurements of the streets and properties of Williamsburg taken by Mr. Perry and two assistants in the quiet darkness between midnight and dawn.

No one became aware of their strange procedure save one negro who, wandering through the blackness of the night, came unawares upon a steel tapeline being dragged across an intersecting street along which, in a somewhat befuddled condition, he was seeking to find his way home. With a terrified yell he leaped over the line and vanished into the night.

Photographs were taken from the air and pieced together, and early maps, including the Frenchman's map of 1782 (page 431), were consulted. Preliminary historical investigations were made to evaluate the properties. Neither Mr. Perry nor the airplane photographer knew for what mysterious purpose these things were being done.

At length preliminary plans of much wider scope than the sketches shown in the Wythe House in 1927 were viewed by Mr. Rockefeller and a few

of his confidential associates in a private room of a New York hotel on November 21, 1927. Soon thereafter authority was given to proceed with the purchase of property essential to the beginnings of the restoration endeavor.

From the outset it was recognized that the value of the restoration would be its authenticity. So that the plans and nuterial structure, the outward architectural form and the artistry of interior decoration, as well as the furnishings in the restored buildings, might be truthful portrayals, a research organization was constituted.



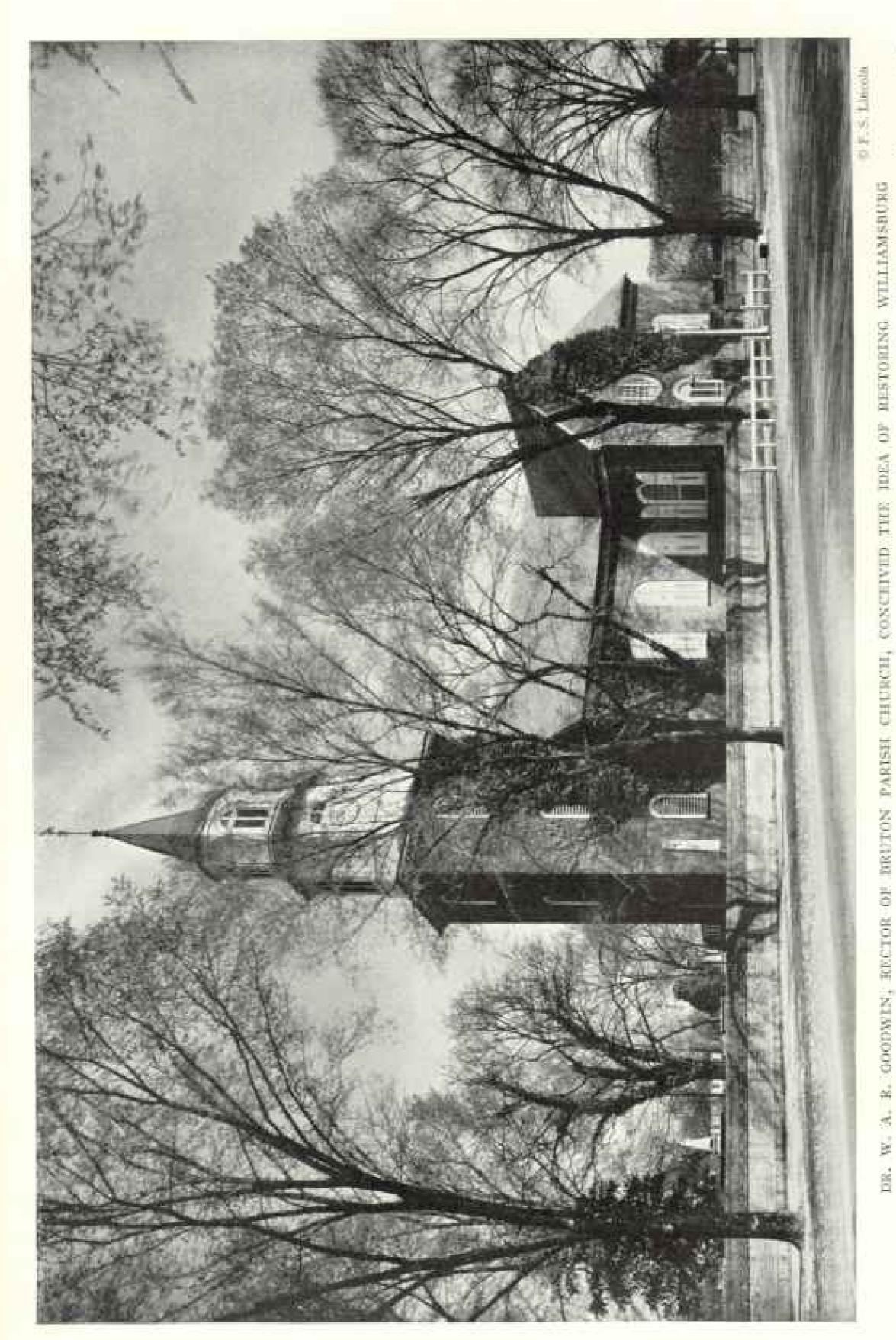
D.F. S. Lincoln

OVER THE MAUPIN GARDEN FENCE, WHAT LOVERS SAID GOODBYET

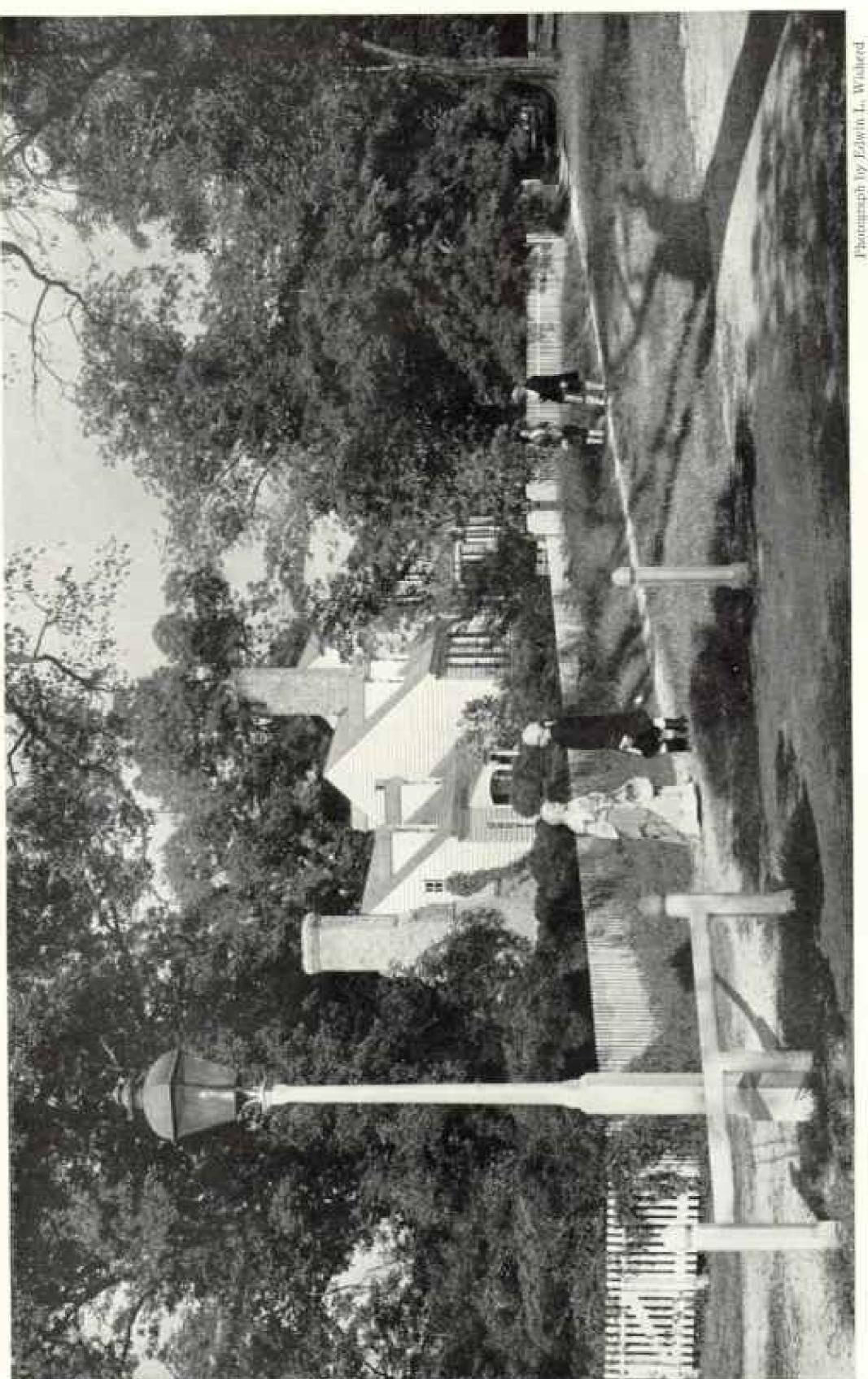
"Persons having Lots contiguous to the great Streets shall enclose the said Lots with a Wall, Pales, or Post and Rails." So read the act for establishing the Capitol at Williamsburg in 1699; and again, after a lapse of 238 years, it has been complied with.

Every possible source of documentary evidence in America, in England, in France, and elsewhere, that offered any hope, was searched by trained investigators. American national and State historical societies, museums, and libraries were visited. Research students were sent to England to examine the records in the British Museum, the Public Record Office, the university libraries, and other public and private collections of old manuscript material.

Mr. Warrington Dawson, of the American Embassy in Paris, combed the archives of France for evidence that might have



At first, handleapped by lack of funds, he devoted his efforts mainly to this building (1719-15), which was thus brought back to its original appearance. Pews are dedi-cated to George Washington, Thomas Jefferson, and to other famous men who once worshiped here (Plates VII and XV).



Photograph by Edwin L. Wicherd

TRST OWNER STILL OCCUPY THE ST. GEORGE TUCKER HOUSE DESCENDANTS OF THE

or his literary and legal works, "assembled" this handsome residence near the Palace Green about 1788, a it. On this property stood the Williamsburg theater, which was built in 1716, and research indicates that "The American Blackstone," St. Goorge Tucker, famous for Probably he moved an old house to the site and added wings to it. some part of it is included in the present structure.



SHOPKEEPERS OFTEN LIVED AT THEIR PLACES OF BUSINESS

This small shop, known as the "Forge and Wheel," was probably built to rent by Christopher Ayscough, a Palace gardener, and his wife Ann. Mrs. Ayscough had been Governor Fauquier's cook and received a handsome bequest at his death, which legacy may explain the couple's real estate holdings near the Capitol. Restoration architects discovered the original framework under a boxlike second story; re-creation produced this result.



Photographs by Edwin L. Wisherd

PETTY OFFENDERS, BEWARE!

Punishment in themselves, the stocks of colonial days inspired enlookers to terment their prisoners, and this was usually contemplated in the sentences of the lesser courts. Sticks and stones, ripe vegetables, and riper epithets were hurled at random.



Photograph by Newton V. Blakesier.

EVEN MODERN BUSINESS HAS "GONE COLONIAL"

When restoration began, this shopping center of Williamsburg was the usual row of small buildings, many of them build dilapidated. Graceless structures with unattractive signs were torn down and replaced by new ones of Tidewater Virginia colonial architecture. The stores harmonize with the restored area and the advertising signs with those of Washington's day.

found its way there from the officers and soldiers quartered in Williamsburg for several months after the Battle of Yorktown. Valuable source material was discovered.

In the library of the College hung the famous map of the unknown Frenchman. It has become known as the "Bible of the Restoration." This map designates to scale every public and private building in colonial Williamsburg as of 1782, when the legend on the map, written in French, shows it to have been drawn.

A CHILD'S SCRAPHOOK YIELDS FACTS

A child's scrapbook of the colonial period, found in Williamsburg, contained a pen sketch of the rear of the Wren building, with notes designating the professors who taught in the various classrooms and the students who then occupied the dormerwindowed rooms of this building.

In the Huntington Library in California was found a floor plan of this main college building drawn by Thomas Jefferson. A floor plan of the Palace made by Jefferson was located in the Massachusetts Historical Society. The most spectacular find was made by a research worker in the Bodleian Library, at Oxford—a copperplate engraved about 1740, showing the elevations of all the colonial College buildings, the Capitol of 1704, and also the Palace with its contemporaneous flanking buildings (page 403). The plate was immediately photographed and transmitted by radio to America.

Numerous other confirming and revealing evidences came to light, establishing the authenticity of architectural designs.

In the College library hung a tracing of a drawing of the College made by a Swiss traveler, Francis Louis Michel, who had visited Williamsburg in 1702. Among the College archives were reproductions of other sketches made by him showing the semicircular walls of the south end of the Capitol, then in construction.

A LOST ART REDISCOVERED

Most of the bricks used in colonial buildings were made in the Colony, usually in the immediate vicinity of the buildings. The art of making the glazed-end bricks which were then often employed for decorative effect had been lost. Efforts were made without result to discover in England, Germany, the Netherlands, and elsewhere the technique of this lost art.

Finally experiments, by primitive methods, were made in Williamsburg, utilizing

Williamsburg clay.

With a negro and a mule to work the mixing apparatus and by experiments with different kinds of wood burned in the improvised kiln, under tested temperatures, the process of making the glazed-end bricks was rediscovered.

The wavy glass characteristic of colonial windows was obtained after various glassmakers in America and abroad had studied

this problem.

The paint upon and within the colonial houses in Williamsburg and throughout Tidewater Virginia was scraped through successive coats and the vivid original paint colors, most generally used in the early and succeeding years of the colonial period, were found and recorded. Similar methods were pursued in the study of woods, ironwork, stone, and tile of the early Williamsburg buildings. Existing fire ordinances prohibited wood shingles; so a fireproof shingle was developed, after extensive experiment, which simulates a cypress shingle.

RESEARCH DISPROVES SOME CHERISHED TALES

To the Restoration's department of research, truth is so dear that it often has to be purchased at the price of romance.

Should anyone venture to write of the tramontane expedition of Governor Spotswood and his Knights of the Golden Horseshoe, the research department would be immediately on the alert to see that the golden horseshoes were worn by the Knights as mementos and not by the horses.

Counting the traditional nights spent by Washington in homes scattered far and wide, the department checks to see if there were that many nights on the calendar or if there were any nights left for him to spend at home, as history records he sometimes did.

Research takes much joy out of life by curbing the careless quoting of cherished traditions as if they were the proved facts of history. Consequently, one is no longer permitted to say that the College of William and Mary helped support the infant Harvard College and helped to Christianize the people of New England, with 45 pounds sterling annually sent by the Virginia college to New England for each of those two objectives.

Investigations reveal that this money was sent for these purposes by the executors of Sir Robert Boyle, who, acting under the discretion accorded them in the will of this distinguished scientist, gave the income of the purchased Brafferton estate in Yorkshire, England, to the College of William and Mary, to build and maintain the colonial Indian School (page 403).

This income was made subject to an annuity for Harvard and for the conversion of the "New England heathen." Thus the annuity was paid directly and was not graciously given by William and Mary, which College doubtless otherwise would gladly have spent all it got on itself.

The research department feels that the restoration of colonial Williamsburg is in itself so romantic and so beautiful that it does not need fictional enchantment.

ADVENTURES IN COLONIAL ARCHEOLOGY

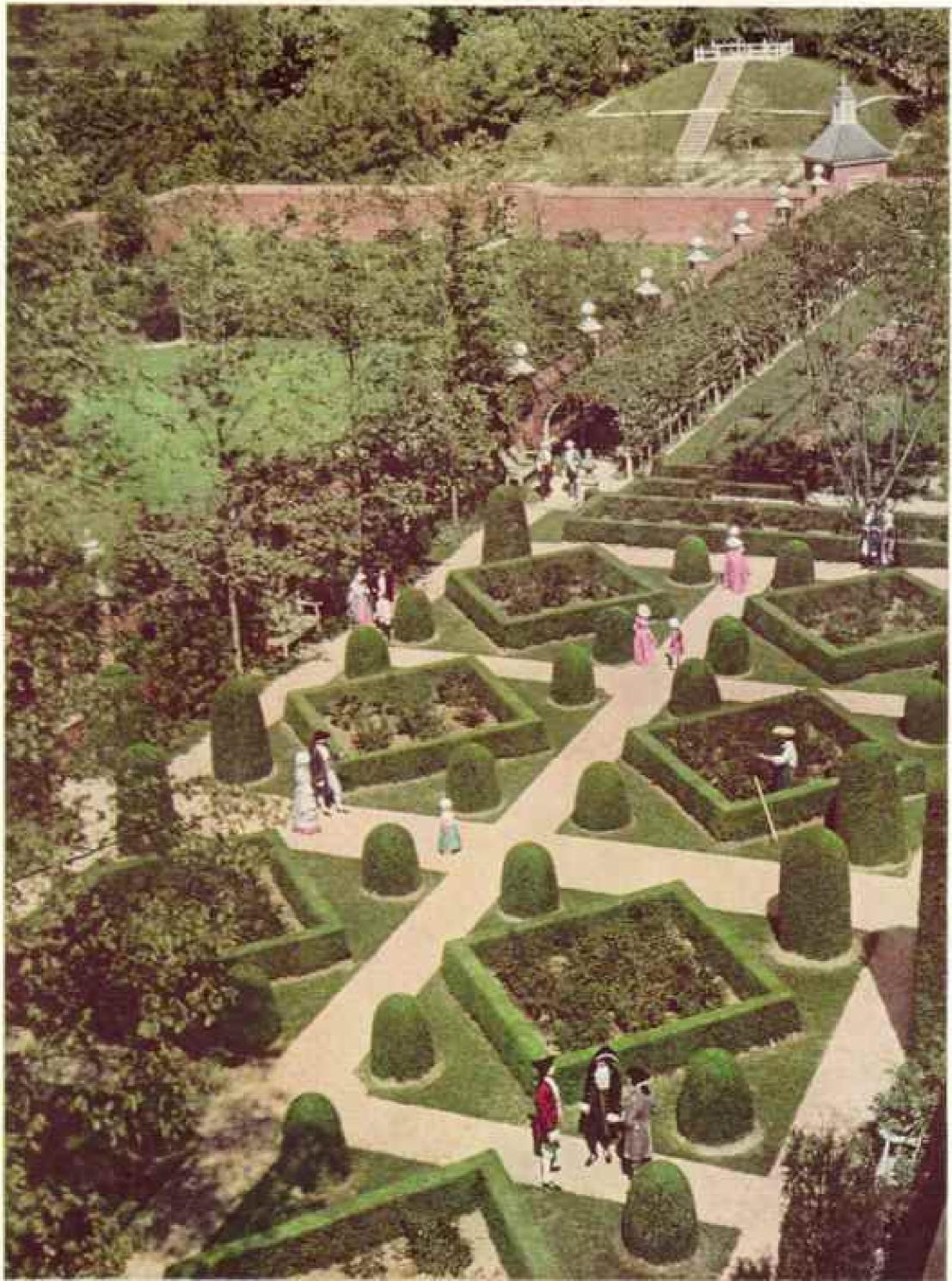
The archeological research work of the Restoration contributed to the solution of many architectural problems. Where colonial houses shown on the Frenchman's map had vanished, excavations were made and foundations unearthed were measured and photographed. Thus the exact size and outline of buildings and the location of chinneys, partition walls, and other items of interest were revealed. The size and shape of the bricks used were determined, as well as the moldings upon stone steps.

Excavations made to unearth the Palace foundations revealed the ancient flagstone floors in the basement in perfect condition, also supporting arches, parts of the old walls, spacious wine cellars, sections of the marble mantels and pictured tiles. A complete photographic record was kept of all excavations made, and of the structural progress of all buildings.

JEFFERSON WOULD HAVE REVELED IN STRUCTURAL WORK

More than forty tons of such material evidences were secured from these excavations. Samples of these materials have been carefully assembled in the colonial Courthouse of 1770, which is now the archeological museum of the Restoration. It serves as an exhibit of the domestic civilization of the 17th and 18th centuries. This building

VIRGINIA'S COLONIAL HERITAGE

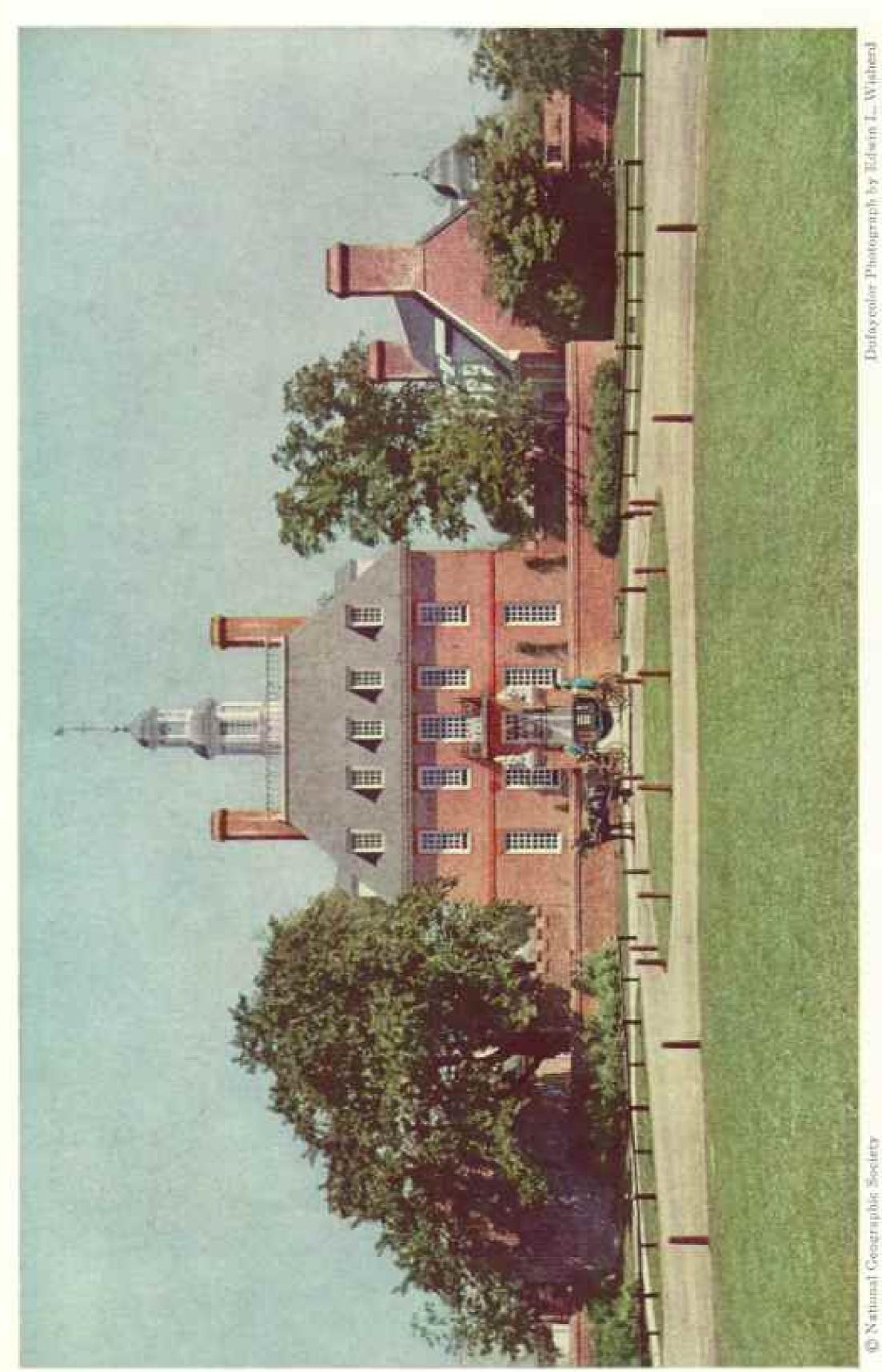


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Finlay Photograph by Willard R. Culver

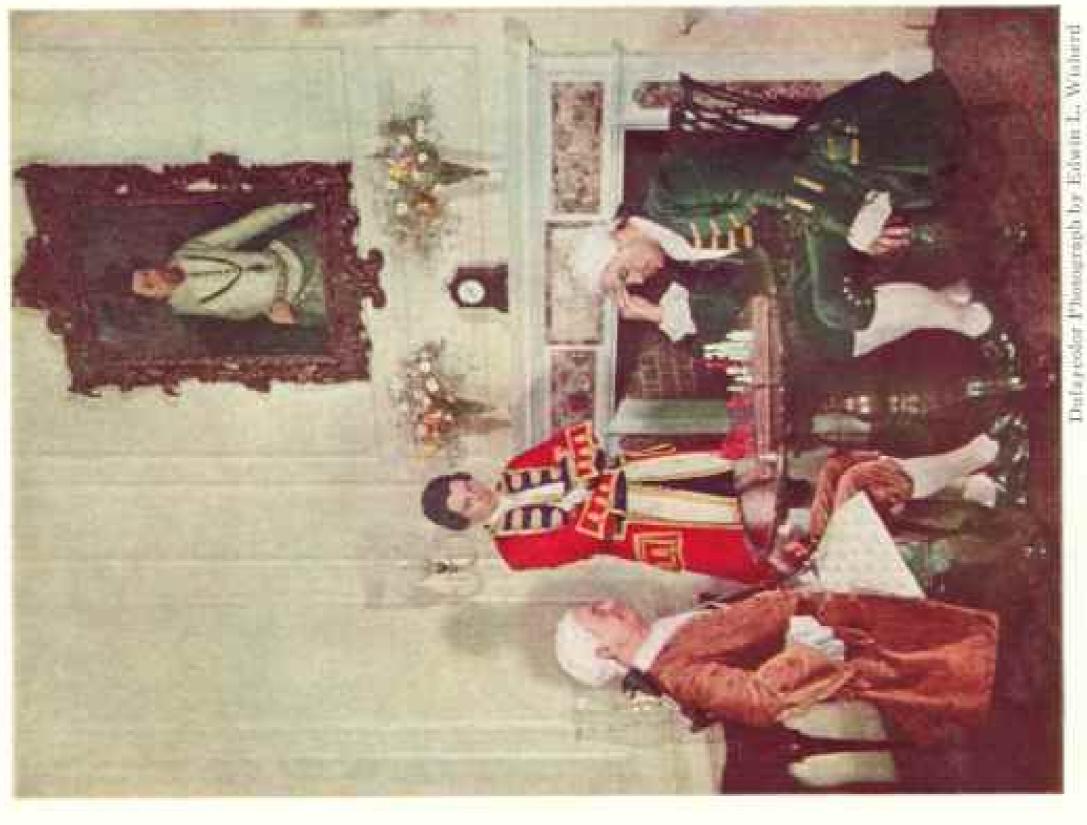
FORMAL GARDENS OF THE PALACE ARE A STUDY IN SYMMETRY

Looking north from the top of the restored Palace of the Governor, the visitor sees these geometrically trimmed hedges and shrubs, all exactly as old documents of colonial days describe them. The pansy garden glows to the right of the long arbor, and the brick wall on its left encloses a burial place of Kevolutionary soldiers. The pyramid or "mount" in the background is the icebouse.



GOVERNOR'S HOUSE THAT IT WAS CALLED THE "PALACE" SO LAVISH WAS THE

Because of financial disagreement between the Crown and the Colony construction of this building was delayed, but when it was completed it because the show place of Williamsburg. The present edifice has been reared upon the original foundation according to detailed plans and specifications found by research workers in pre-Revolutionary documents.



SCHOOL

BARGE

KKKKKK

新田田田

A PORTRAIT OF JAMES 1 LOOKS DOWN ON A CHECKMATE of governors who died in office. This pie-crust table belonged to Chief Justice Marshall.

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THE LION AND THE UNICORN FLANK THE GATE

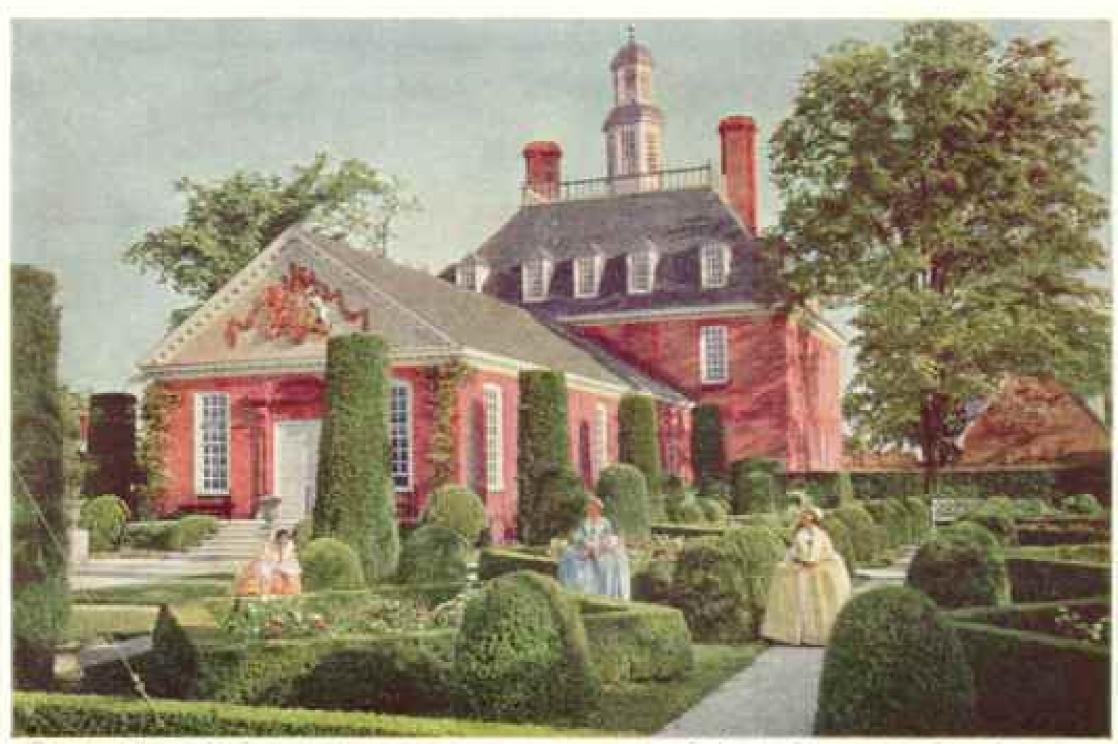
THE LION AND THE UNICORN FLANK LITH UNITS
It appears the cipher G. R., the symbol of George I, in whose reign the
building was completed.

MILL STREET

THE NATIONAL GEOGRAPHIC MAGAZINE



"TWELVE APOSTLES" OF TRIMMED REDCEDAR GRAUE THE BALLROOM GARDEN
Faithful reproductions of English lawn decorations in the colonial period are these trees, hedges, and
shrubs before the north wing of the restored Palace.



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ABOVE THE BALLROOM DOOR GLEAMS THE HANOVER COAT OF ARMS

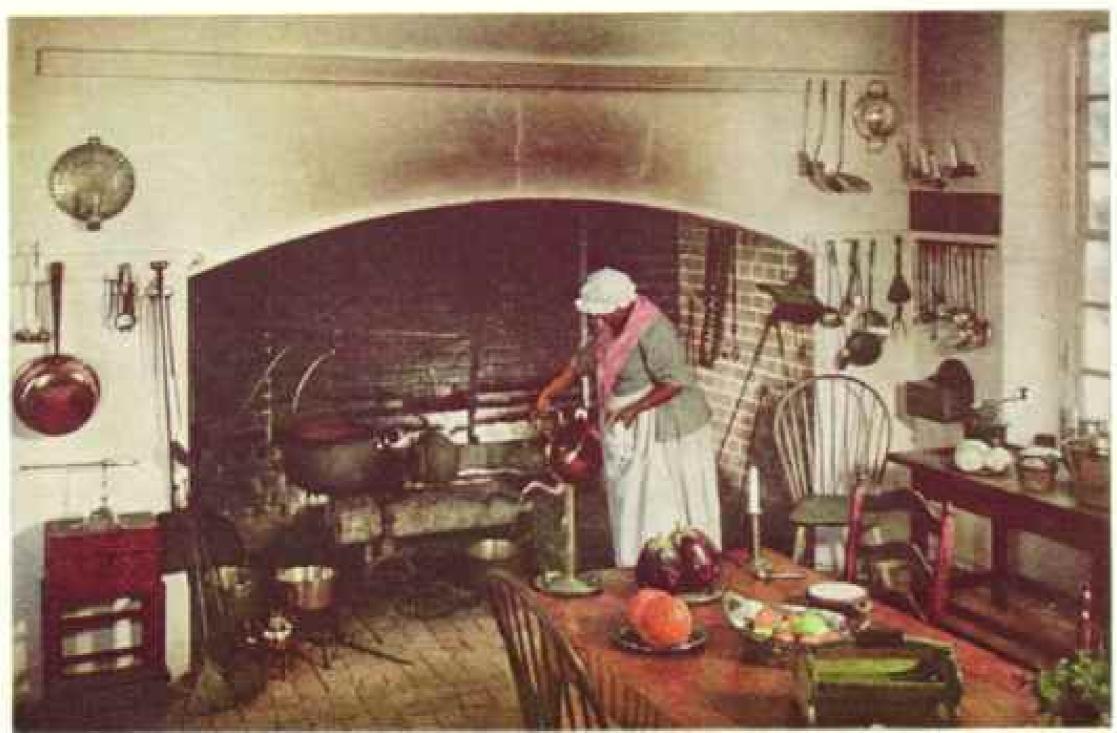
The original cupola surmounting the main part of the Palace housed a "great furthern" which was lighted on the King's birthnight and on other occasions of public rejoicing.

VIRGINIA'S COLONIAL HERITAGE



Dufayoolor Photograph by Edwin L. Wishird NOX TREES TWO CENTURIES OLD SURROUND THE BOWLING GREEN

Williamsburg had such a public sward for the game of bowls, but it was near the playhouse, not on the Palace grounds where the restoration has placed this one.

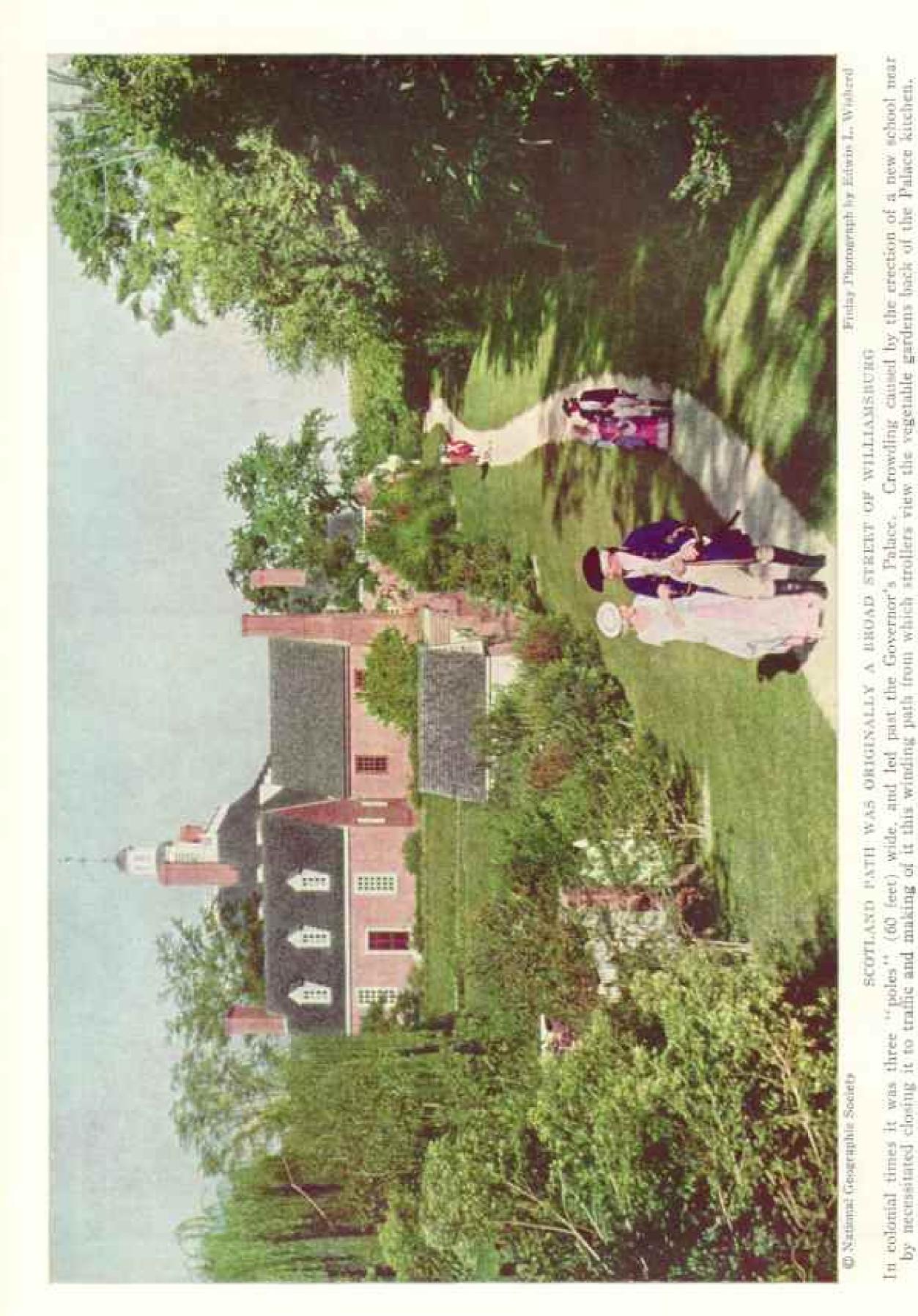


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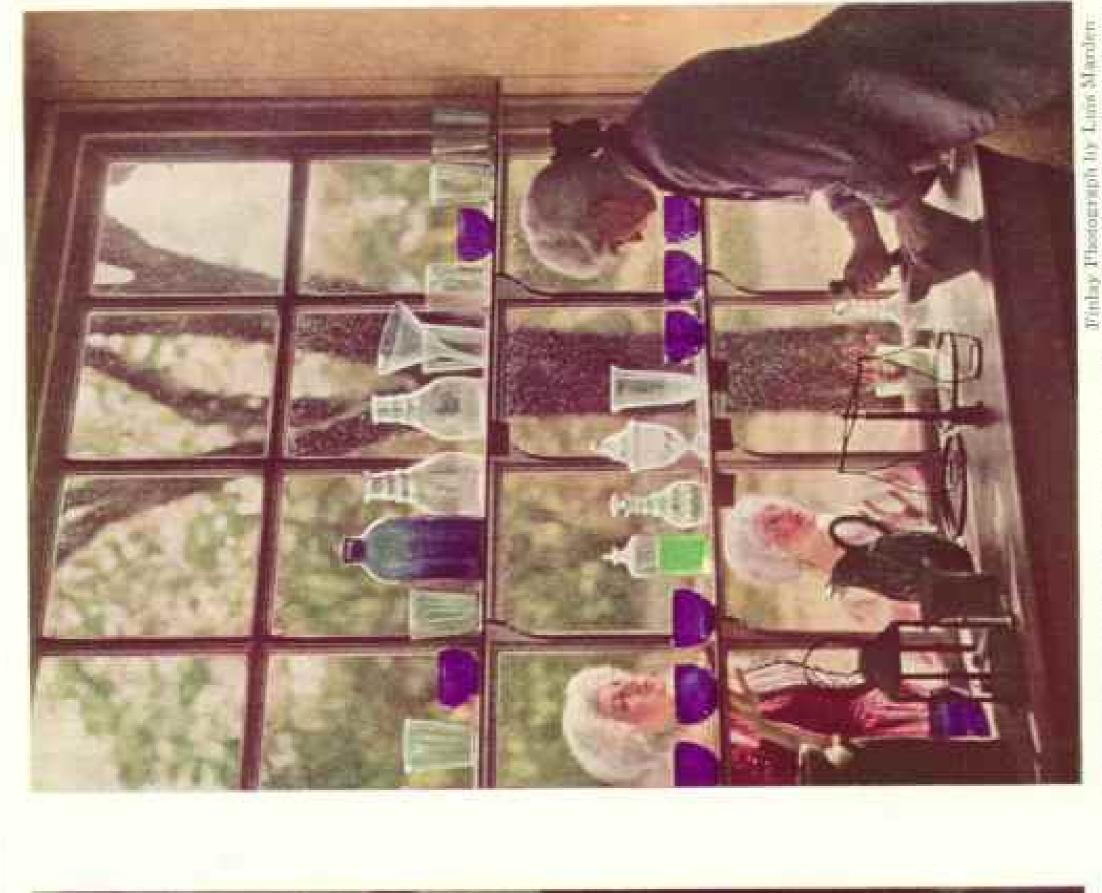
Finlay Photograph by Willard R. Culver

"MAMMY" EXPLAINS TO VISITORS THE USE OF COOKING UTENSILS

Garbed in colonial attire, she tells about the toddy from on the chest (left), the pothooks, spit, coffee roaster, flesh forks, ladles, and the rest of the historically correct equipment of the Palace kitchen.



XIV



© National Geographic Society Defaynolor Photograph by Edwin L. Wisherd FOLK OF OLD JAMESTOWN WERE BAPTIZED AT THIS FONT

Bruton Parish Church treasures both it and the Communion service brought to Williamshing when the first settlement's bouse of worship was abandoned. The building was restored through the efforts of its rector, Dr. W. A. R. Goodwin (Plate VII).

DR. BLAIR USED SUCII MORTARS. PESTLES, SCALES, AND PHIALS Colonial Williamsburg maids were doubtless attracted to the shop window to see the pown apothecary prepare, as advertised, "all sorts of balsams, decoctions, electuaries, elixirs, emphaisters, infusions, fiquors, magnisteries, oils, and oinfinents."

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Dufaycolor Photograph by Edwin L. Wisherd

FROM THE PALACE PANSY BED COLONIAL DAMES PLUCKED NOSEGAYS

Garden week in Williamsburg attracts thousands of visitors, who admire the blossoms with their background of boxwood hedges intersected by mari and shell walks. Trees, shrubbery, and flowering plants have been chosen by the restoration in accordance with careful research. Some housewives, descendants of the original homeowners, complain today that it is not orthodox to grow even up-to-date vegetables!

also is designated as the information bureau of the Restoration (page 412).

The early structural period of the restoration would have been of absorbing interest to Jefferson could be have then revisited the city. His versatile mind would have found delight in the scope and methods of the work. Ditches, in some places 18 feet deep, were being dug by steam shovels for new water mains and sewerage pipes. Trenches were being made to conceal telegraph and telephone wires.

Concrete streets and sidewalks were then giving place to gravel roads and to brick and flagstone sidewalks.

In those early days of the restoration one never knew when he went to bed whose house he might meet in the morning moving down the street. Sometimes it proved to be a colonial house on its way in to fill a vacant space, but more often it was a modern home exiled from the restoration area.

Many visitors, having heard that the colonial city was to be restored, assumed that within twelve months it would surely be finished. They began to arrive. No suitable place had yet been provided for their accommodation. They found the streets blocked off. They met the houses which were moving out as they moved in. They ran their cars into rain-soaked ditches recently filled in, or got lost in detouring in efforts to get somewhere and see things not yet existent.

Language was heard that desecrated the "serene and temperate air" which, in colonial days, was said to have constituted a great advantage of this place.

459 BUILDINGS DEMOLISHED

The restoration project has now been in progress for more than nine years. During this time it is officially stated that in addition to the three colonial buildings at the College, 67 buildings have been restored. Ninety-one colonial buildings have been reconstructed, 18 modern buildings have been moved from the restoration area and set up elsewhere, and 459 modern buildings have been demolished.

This procedure was made necessary to get rid of the corrugated iron buildings and other incongruous structures by which the colonial city had been modernized and spoiled. Two blocks of new business buildings of a colonial style of architecture, containing 13 shops, a bank, and a post office, have been erected, adjoining the restored area.

Not including the labor spent in manufacturing and transporting material, nearly five million man hours of labor have gone into the restoration endeavor.

In carrying forward the work it has been necessary to have important dealings with the National Government, with the Governor of Virginia, the State Legislature, and with various departments of the State Government. Contract agreements had to be entered into with the governmental authorities of the city of Williamsburg and the County of James City, and also with various State and local institutions and public utility and public service corporations, as well as with various State and local associations. In every instance a splendid spirit of cooperation was manifested.

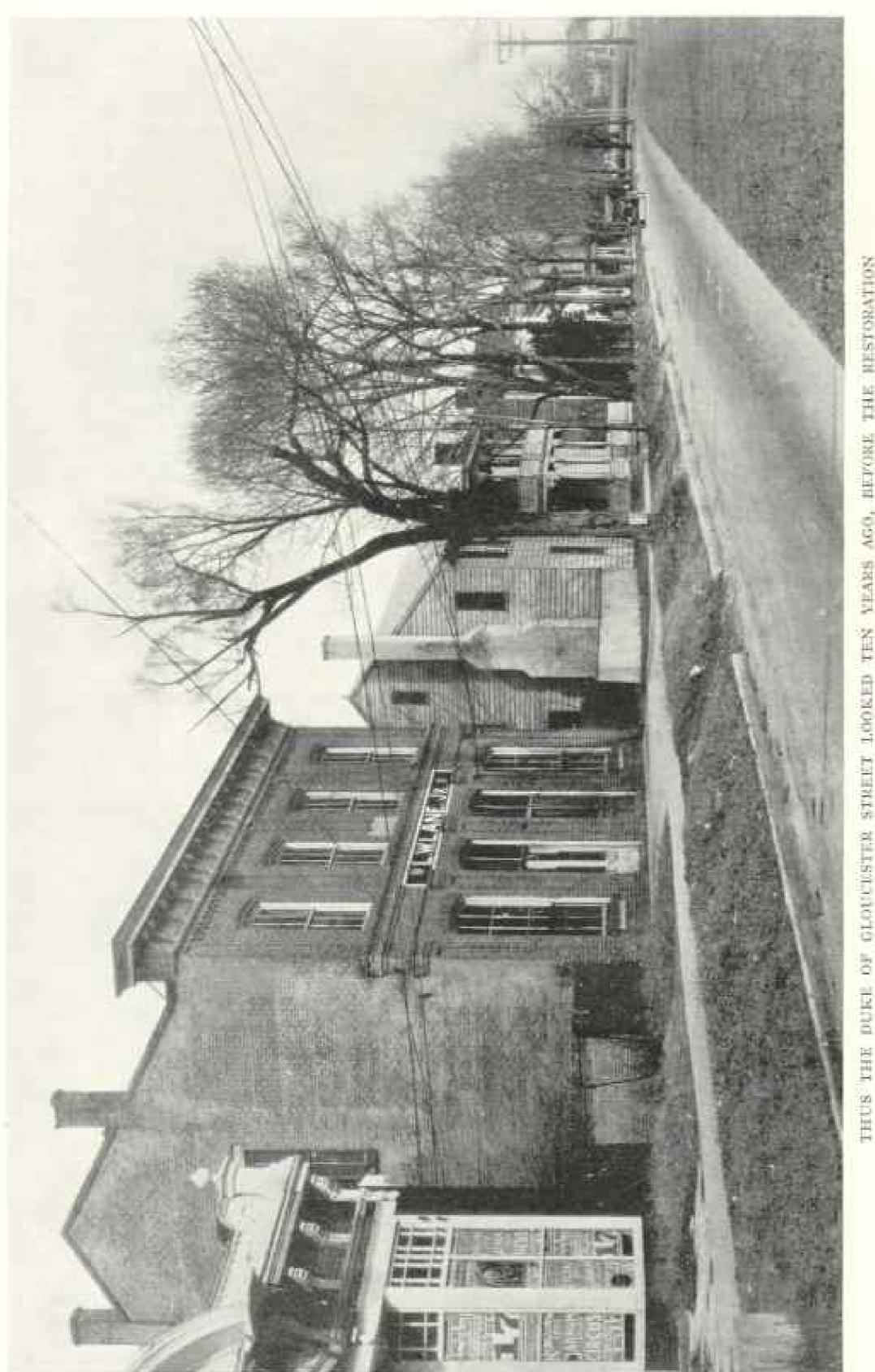
THE FIRST TREES AND FLOWERS OF VIRGINIA

Restoration of the gardens also called for extensive research work. Because of the ravages of war and consequent poverty and neglect, the form and outline of most of the colonial gardens had vanished. More than one hundred colonial gardens of note in Virginia were visited, measured, and photographed, and extensive research was done in the contemporaneous gardens of England. From old maps and photographs and by archeological investigation, old paths in many instances were located, revealing the form and dimensions of the original gardens.

The ancestry of every tree, flower, and shrub supposed to have lived in colonial Williamsburg was investigated and only those of proved pedigree have been transplanted or allowed to survive. If, in the course of evolution, flowers, shrubs, and trees should develop into conscious pride of ancestry, then they will surely convene in Williamsburg and elect Arthur A. Shurcliff, landscape architect, patron saint of their colonial genealogical society!

The spaciousness and variety of the revived gardens give to the buildings restored an environment of charm and quiet loveliness. This is especially true of the formal and terraced Palace gardens (Plate IX).

The infallible rule of the Restoration prohibited moving any boxwood, houses, or building materials from any except deserted places, it being felt that no justification could exist for despoiling other homes to restore colonial Williamsburg.



AGO, BEFORE THE RESTORATION

suble a gravel surface, covers the road. The monument just visible beyond the telephone pole marks the spot As if by mugic, modern ugiliness has given way to the quiet grace of early duys. Telephone and Instead of The two stores in the left foreground were on the site of the Raleigh Tavern, now one of the most interesting of the reconstructed colonial buildings (Plates II and III and page 413). These two structures and 457 others were demolished, 91 reconstructed, and 18 moved bodily from the restoration area to more sainable sites. cs have been removed the concrete paving, asphalt, put down in such a way as to reset upon which the elaborate colonial Capitol stands today (Plates electric-light wires are now below the ground, and unsightly polThe restoration is now near completion.

The early appearance of newness is wearing away. Vines have climbed over the fences and walls; flowers and shrubs have taken root in the gardens.

Two liveried coaches, doubtless the forerunners of many other horse-drawn vehicles yet to come, carry the costumed hostesses to the exhibition buildings and in the late afternoon carry them home. These hostesses have received intensive training and are well qualified to interpret the restoration to visitors.

GUIDES IN PERIOD COSTUMES

Recently a guide service has been organized for those who do not prefer to find their own way through the restoration area.

Costumed men show the restored Public Gaol to visitors, and other men in costume may be seen working in the gardens or serving in buildings, while two old negro women, in fitting costume, preside over the Palace kitchen with a courtesy they learned from those whom they affectionately recall as "ole Missus."

There already is evidence of the farreaching effect of the restoration. The establishment of the Colonial National Historical Park was due in no small measure to the work already undertaken by Mr. Rockefeller in Williamsburg. It was exhibit number one when Dr. Ray Lyman Wilbur, former Secretary of the Interior; Mr. Horace M. Albright, then Director of the National Park Service, and Mr. Louis C. Cramton, who later introduced the Bill to create this park, came to evaluate the suggested idea.

The Restoration also contributed to the passage by Congress of the Historic Sites Bill. Its influence on home builders and their architects far and wide is evidenced by constant inquiries. In these and many other ways it is helping to make America more conscious of the strength and beauty of its past.

The management of the Restoration is under the control of two corporations. Williamsburg Restoration, Incorporated, has charge of the construction and maintenance and general financial management of the work, while the care and direction of the exhibition buildings and of the research and educational departments are under the control and direction of Colonial Williamsburg, Incorporated.

A new air-conditioned hotel of "early Republic" architectural design, situated just outside the restoration area, is to be opened in the early spring of 1937. Its southern outlook is upon the fields and forests which border upon the city restored.

As a part of the interpretative and educational program, plans are being perfected to introduce handicrafts. Craftsmen will make reproductions in many of the colonial arts and trades, working in restored or reconstructed buildings.

Arrangements are also being perfected for making authentic reproductions of the antique furniture of the exhibition buildings, and for making available the colonial paint colors which have been reproduced in the buildings.

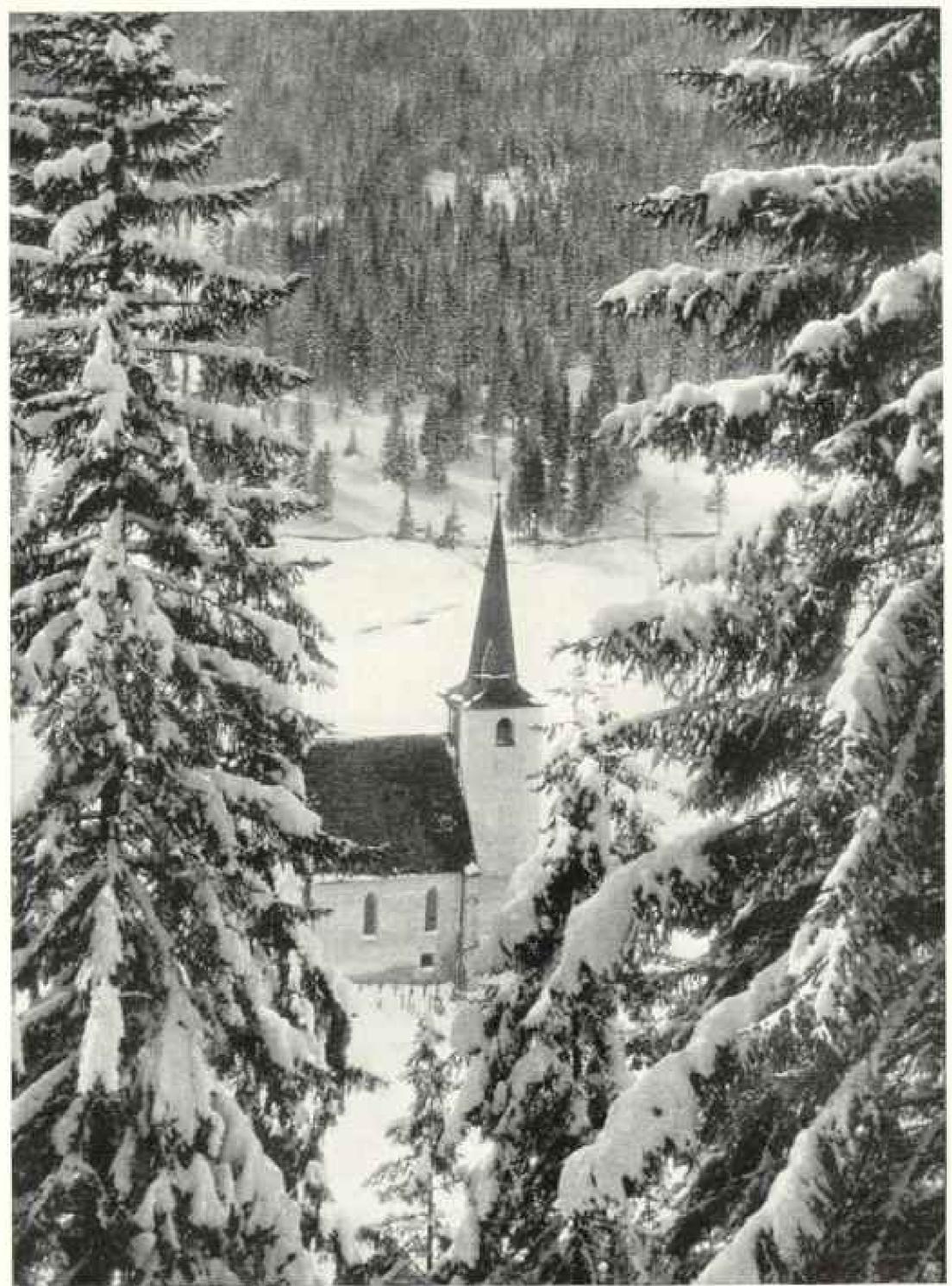
Any profit which may result to the Restoration from these undertakings and from other sources of revenue will be devoted exclusively to the maintenance of the Restoration and to its educational program.

The Restoration is a gracious and beneficent gift of great cost (it has been reported that more than \$14,000,000 have been spent upon the undertaking), and it is dedicated to the spiritual enrichment of human life.

The American Institute of Architects recently held its annual meeting in Williamsburg. Days were spent by those present, who numbered nearly 600, in viewing and critically studying the work accomplished. They passed resolutions of enthusiastic endorsement.

Similar resolutions were passed by the advisory architects of the restoration and by a group of noted professors of American colonial history, and thousands of others, who have visited and viewed the results accomplished, have individually expressed their delight and also their deep gratitude to Mr. Rockefeller for what he has re-created.

Among the many benefactions of Mr. Rockefeller and his father, none, perhaps, will prove more lasting, illuminating, and inspiring than what he has done, through the restoration of colonial Williamsburg, to wed truth and beauty here to be the interpreters of the past to the present and the future.



Photograph by Curt von Coll

LIKE ANOTHER SPRUCE TREE IS THIS CHURCH STEEPLE IN A SNOWY FOREST

In Austria, the author found that vast strides had been made in referestation. In the valleys and on the hillsides she observed the dark rich green of spruce and fir, the tender green of the larch, and the long, unbroken ranks of pine which stretch for miles and miles. Even the smallest community maintains a church, which plays a leading part in village life. Almost every farmhouse has its own stone chapel, with a blue and white Madonna and rows of high-backed benches where passing travelers may join the family at worship.

THE SALZKAMMERGUT, A PLAYGROUND OF AUSTRIA

By Florence Polk Holding

RUSS Gott," said a little girl in gingham dress and diminutive white apron as I stepped off the express train at Salzburg on my way to Mondsee.

"What does that mean?" I asked my

companion.

"It means," he said, "'God bless you' or 'God be with you,' and you will hear that salutation every day and many times a day. But you will never tire of hearing it," And

he was right.

I had come direct from Paris on the Oriental Express, and this was transition with a vengeance: lakes and mountains, pure air, friendly people, gingham dresses and bright aprons, leather breeches, Tyrolean hats with green bands and eagle feathers and a sprig of edelweiss.

Through Germany I had watched with eager interest the rolling country, the rich, dark forests, the curious stacks of grain which dotted the fields and which looked like a procession of booded monks (page 475). I had noted the countless mounds of turf piled high for fuel beside the well-

kept farm buildings.

In their neatness and compactness the German towns seemed to have stepped out of a Maxfield Parrish canvas. When I looked at the modern factories and rows upon rows of homes for workers, I could easily believe that I was back in the New World.

Just as I was becoming accustomed to all this industrialization, the train had approached the Austrian border, and in the blink of an eye I had been projected back into another age.

AN OLD-WORLD FORTRESS FROWNS

Suddenly I caught a glimpse of that onceimpregnable fortress, the Hohensalzburg, which rests so securely on its granite heights and looks so defiantly down upon the city of churches at its feet (page 450).

You never forget that first glimpse of Salzburg. It is like a mirage. The whole thing bursts upon you so surprisingly that even the mountains seem not quite real. And repeated visits only intensify that first impression of unreality and evoke again that unrestrained astonishment. I was to come to Salzburg many times, but never with a greater feeling of reverent joy than on this first bright morning.

"Grüss Gott," I called back to the little girl in the gingham dress—rather timidly, for I had had some experience with Continental children before!—and all at once it seemed that I really had been blessed.

In a few moments my bags had been transferred from the main depot to the little station across the street and I was on my way to Mondsee, in the heart of the Salzkammergut (map, page 446).

HERE EVERYBODY SPEAKS TO YOU

As soon as the traveler leaves the suburbs of Salzburg, he notices two things: first, that everybody speaks to him; second, that everybody is wearing the distinctive costume of the district. A veritable rain of "Grüss Gotts" descends upon him and he is suddenly very self-conscious about his own attire.

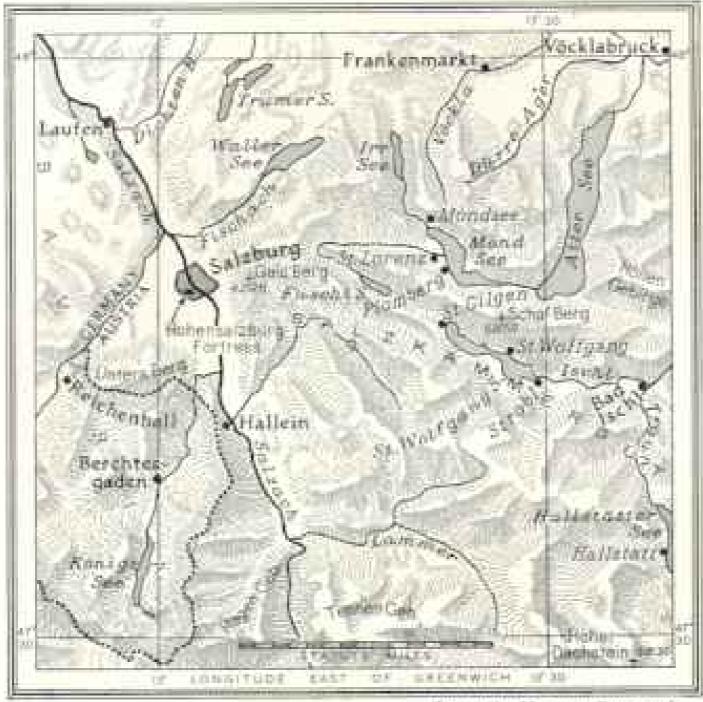
I had another surprise when, after having ridden some distance on the Bad Ischl train, we got off and were instantly precipitated into the open country.

I knew that the former German Crown Prince spends a month almost every summer in Mondsee. There Napoleon once paid a visit of several weeks, and there the former Austro-American Conservatory of Music had its headquarters. But as I looked around I was sure we had failed to make ourselves clear to the train conductor and that the whole thing was, after all, a mistake.

My companion, who had been there before, reassured me. A gasoline train of one car turned the corner from nowhere, and before I realized it we were making our way into what has often been called the "Switzerland of Austria" (page 451).

This is not a true comparison because the sharp contrasts of the Swiss Alps are lacking. Nature here seems more inviting. All the peaks of the Salzkammergut, including the majestic Dachstein glaciers, visible from almost every corner, are softer in outline and free from the awesomeness which sometimes overpowers a person in the presence of the higher ranges.

Even the shaggy crags of the Schaf Berg, the mountain which stands in the midst of some 27 shimmering lakes of blue-green water, are benign and friendly.



Drawn by Newman Burnstead

LAKES AND PEAKS DOT THE SALZKAMMERGUT

Festival-loving Salzburg, chief city of this Austrian playground, is about 150 miles west of Vienna and close to the German frontier. Emperor Franz Josef was long a leading summer resident of Bad Ischl.

The Salzkammergut is a paradise of mountains and lakes—mountains that are not inaccessible to the average climber and lakes that are not only delightful for sailing but warm enough for bathing. This refuge from the cares of the world is more and more attracting those who would escape a too rapid pace and do as they please for a while.

Here in the Salzkammergut you will find Jeritza and Lotte Lehmann, fresh from their winter triumphs. Here in summer come many of the great conductors, such as Toscanini, Bruno Walter, Eugene Ormandy, and Rodzinski.

Here come young composers, seeking a haven after the adulation of the capitals of Europe. Here are the Duncan dancers, and many writers, painters, lecturers. And here are a large number of average American citizens like myself, to say nothing of thousands of Germans who are not deterred by the magnificent posters in their railway stations begging them to see their own country first.

One thing did deter them while it lasted. It was the fine of one thousand marks (\$250 at the time) imposed by the German German citizen crossing the Austrian border. How that punished the Salz-kammergut! I can still see, only too well, the deserted beaches, the empty inns, the shut-up cottages, the long faces of the natives, in 1933, as they waited all summer for the trade that did not come.

Standing beside the lake at Mondsee that first morning, I was reminded of Lake Louise in the Canadian Rockies. The water was the same lade green. In the middle distance glistened the snowy fields of the Dachstein, distinctly suggestive of the Victoria Glacier, in British Columbia. When I looked at the swiftly rising hills that ran back from the eastern shore like a well-brushed pompadour, I thought of St. Moritz.

As we turned into the broad, cool avenue called the Lindenallee, we found it alive with people—week-end guests, summer residents, youngsters on their way to the mountains. For it was Sunday, and, as the German says, "Sonntag ist der Lieblingstag" (Sunday is the favorite day). Hordes of people were passing through to other places, on foot, on

bicycles, in cars.

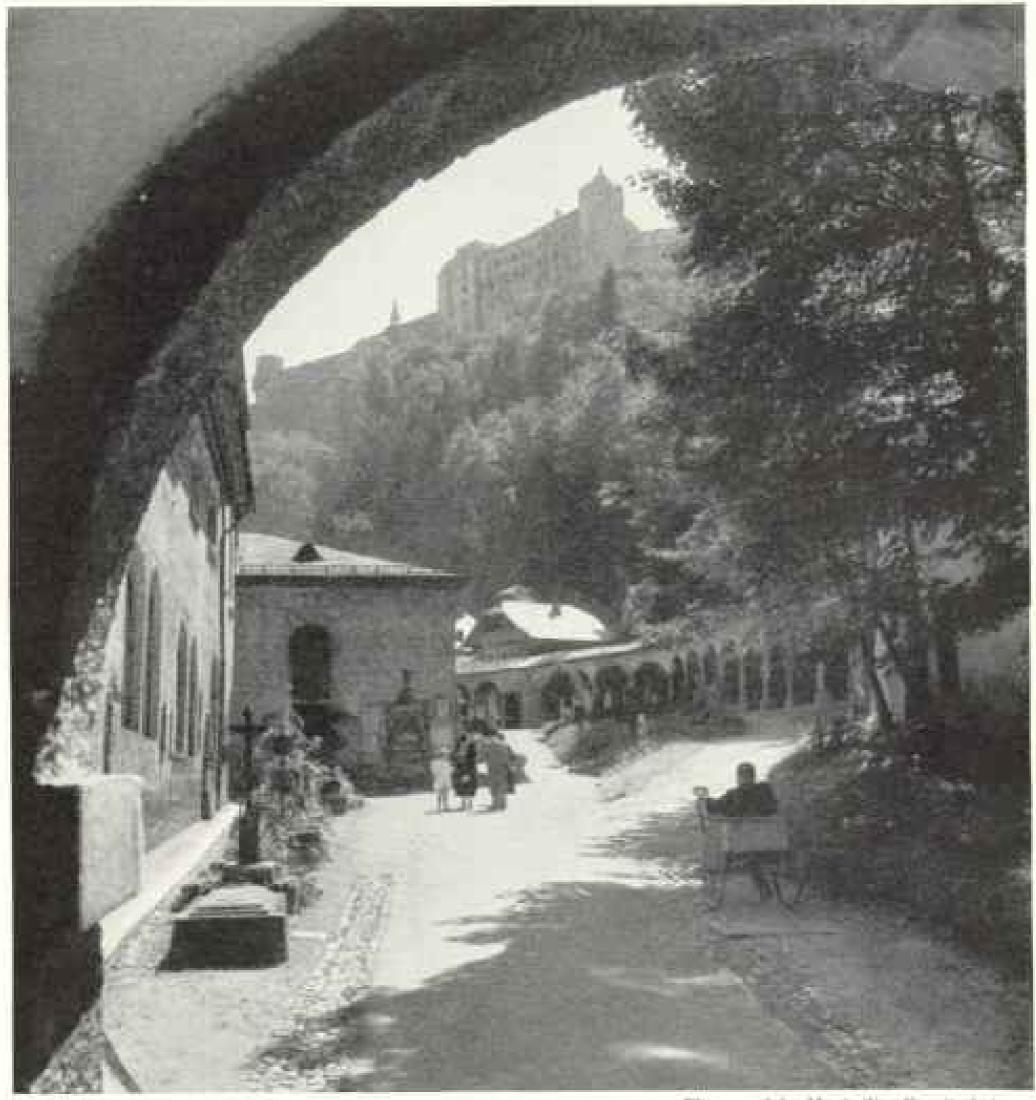
My companion was telling me the history of the region.

"This, you know, is very old country. See that huge bowlder over there? It was left right in that place and position during the last glacial period."

I was more impressed, however, by the smaller stones, certainly not left by a glacier, which were piercing my Philadelphiamade shoes.

SALZKAMMERGUT MEANS "SALT CROWN LAND"

"The Romans knew this country well,"
he went on, "and worked the ancient salt
mines that give the Salzkammergut its
name; the literal translation is 'Salt Crown
Land,' There are many traces of the
Roman occupation.



Photograph by Musimilian Karninschning

THROUGH AN ARCH, VISITORS TO THE CASTLE SUPPENLY SPY THEIR LOFTY GOAL

Strolling up the hill past the arcaded Cemetery of St. Peter (right), travelers may climb adout to Hohensalzburg. Some prefer the modern funicular railway that replaces a horse-drawn cable car constructed in 1504. With its dungeons and torture chambers, the archbishops' old stronghold provides a gloomy contrast to the festival town of Salzburg below (page 450).

"Castle Mondsee, in which you are going to live, was once a flourishing Benedictine monastery with a huge church attached to it. It was established in 748."

748! I thought back. Why, that was only six years after Charlemagne, who later ruled this country, was born!

I said aloud: "Just as it stands today?"
"No indeed! The monastery suffered several major disasters through fire and pillage, as did the whole of the Salzkammergut, Wars and conflicts laid waste the country over a period of a thousand years. Hordes

of barbarians overran the valleys while the powerful prince-bishops sallied forth from their strongholds to fight their equally powerful neighbors, terrorizing the country all about."

I looked around me. It was hard to believe. The pastoral beauty of the landscape, the serene peace everywhere, the quiet, musical voices of the people, excluded all thoughts of war and bloodshed.

"But the Salzkammergut," he continued, "emerged triumphant from all this dev-



Phidograph by Josef Zlegler

DAVID AND GOLIATH OFTEN PARADE IN SALZBURG TOWNS

Afterward they re-enact the Bible story of the fight. The "youth, ruddy and of a fair countenance—put his hand in his bug, and took thence a stone, and slang it, and smote the Philistine—and he fell upon his face to the earth" (I Samuel: 17).

astation, repaired her towns and villages and restored the ancient buildings, while keeping their medieval charm and character. After a thousand years the monastery was dissolved.

"About this time Napoleon hit upon the idea of making this a short cut to Russia. He engaged the services of a Bavarian, Prince Wrede, to conduct the French troops through the Salzkammergut, in return for which the Prince was made a field marshal and given the abandoned monastery as a residence.

"Later Napoleon paid a visit of several

weeks here and the present state bedroom was furnished for him, according to his own instructions. Your host, Graf Almeida, is the great-grandson of that same Prince Wrede, And, as a special privilege, you have been assigned to the state bedroom and will have Napoleon's bed."

Was I dreaming? But no, we
had just emerged
from the shaded
avenue of lindens
into the treeless
glare of the market place and
there before me
stood the great
square castle with
the huge baroque
church beside it.

"Guten Tag"
(Good day),
said each genial
innkeeper as we
passed, one after
another, the
quaint two-story
houses gaily
painted in delectable shades
of pink, buff,
and green.
"Guten Morgen"

(Good morning) resounded from every side, a greeting abbreviated by the old men to a rather doleful "Morg," or "Morg'n."

ONE-MAN SIDEWALKS, NARROW STREETS

We were walking in the middle of the street, for the sidewalks in most of these towns are not wide enough for two. They reminded me of old streets in Paris where he who is on the outside has to navigate with one foot below the curb. The streets in Mondsee are so narrow that the wooden eaves of the houses look like friendly old gossips leaning out to glean the latest scandal.



NO NATIVE SALZBURGERS ARE THESE STROLLERS WITH THEIR GERMAN SHEPHERD DOG

Their hats and gingham dresses are characteristic of the district, but the shoes betray the summer visitor. In general women of the Salzkammergut wear heavier footgear. This esplanade along the Salzach River is a favorite place for promenades. Towering like a castle in the clouds, the 860-year-old fortress of Hohensalzburg dominates the town.

I glanced at my very urban-looking luggage, fresh from a New York shop. It was being jerked and jolted over the rough stones in a clumsy two-wheel cart by a kindly old crone who had picked us up at the railway station. No taxis here!

It was incredible that only a few hours before I had been dining in Paris. Or that by retracing my steps I could, within an hour, board a train for Vienna, Budapest, Sofia, Rome, Paris, or Berlin!

We made our way through the immense crowds to the Schloss, or Castle. All about us groups of peasants in holiday garb greeted us cordially.

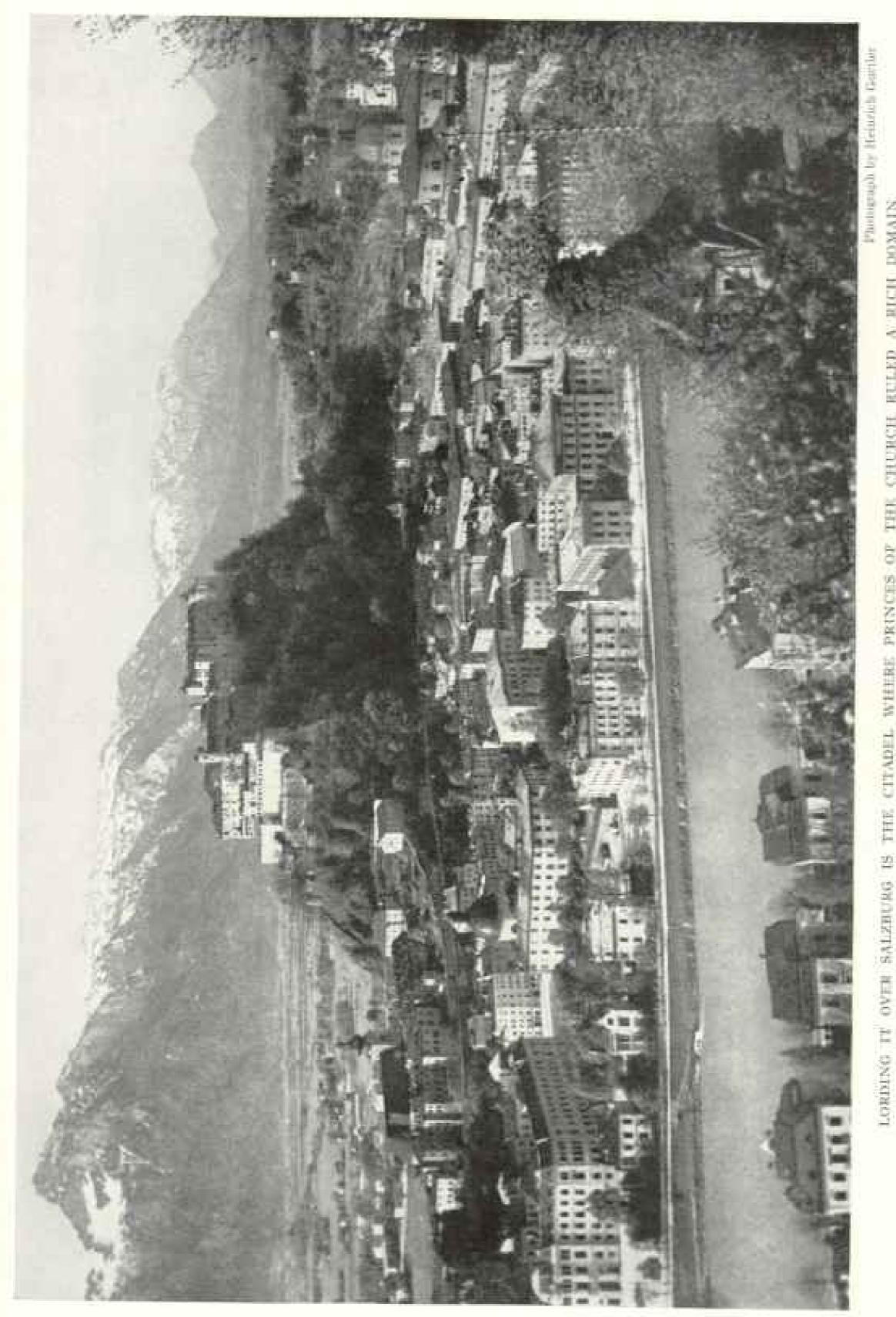
"Wait a minute," said my friend. "Clear days like this and a crowd like this make a rare combination in the Salzkammergut."

And with that he started his motion-picture camera as I moved to and fro amid the friendly throng.

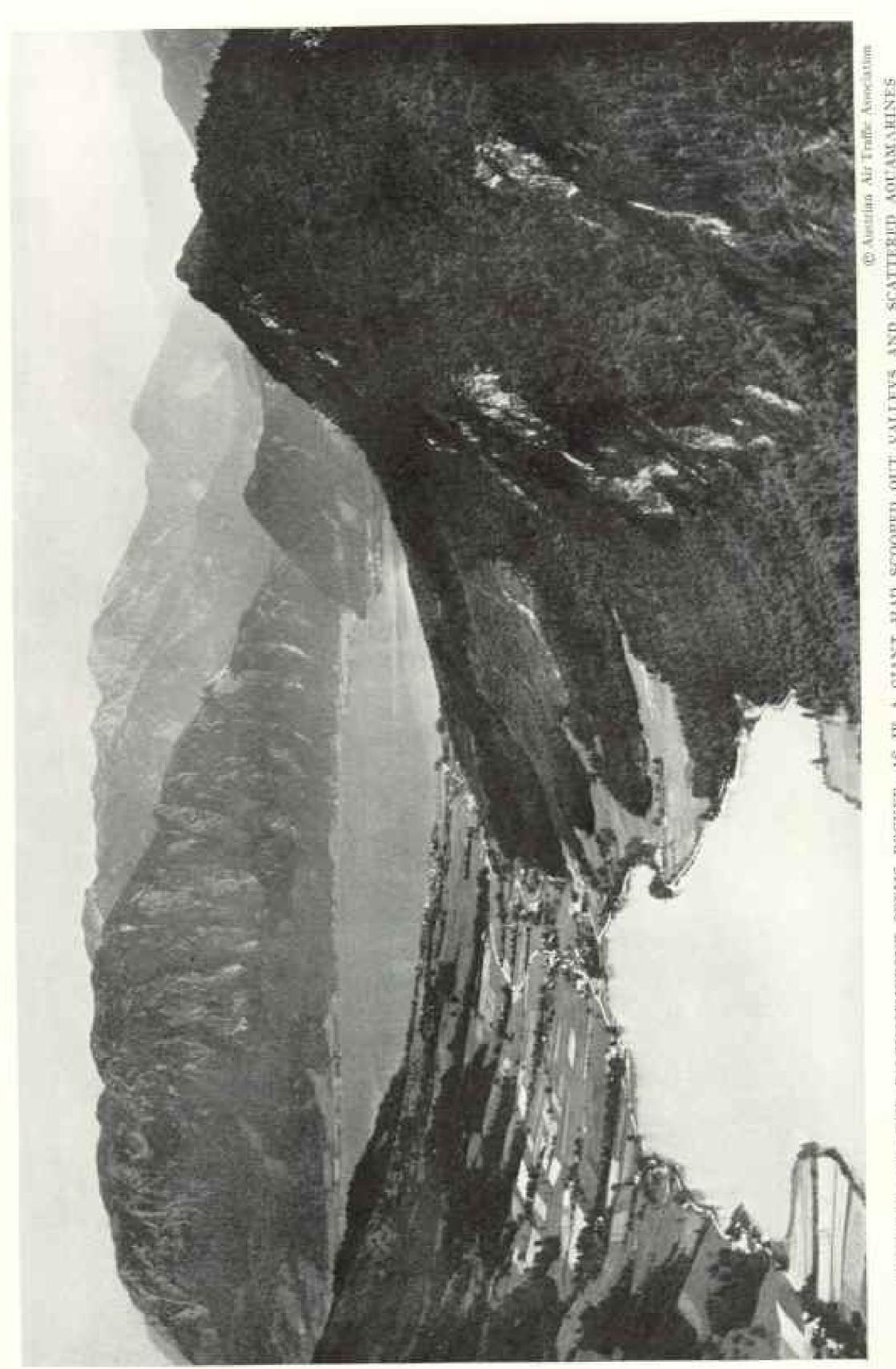
The bright color in dress, apron, scarf, braid, and hat made each group of people look like an old-fashioned garden of flowers.

I made hasty mental notes of the variety in costume. On Sundays and other religious holidays the unmarried girls wear chaplets of white wax flowers in their hair. The married peasant women wear the "bridal crown," a black, glazed-linen affair bound tightly over the head with unbecoming streamers sticking out like elephants' ears (page 469). It puts a premium on the unmarried because of its sheer ugliness. And, indeed, in the two summers I spent here there were only two weddings.

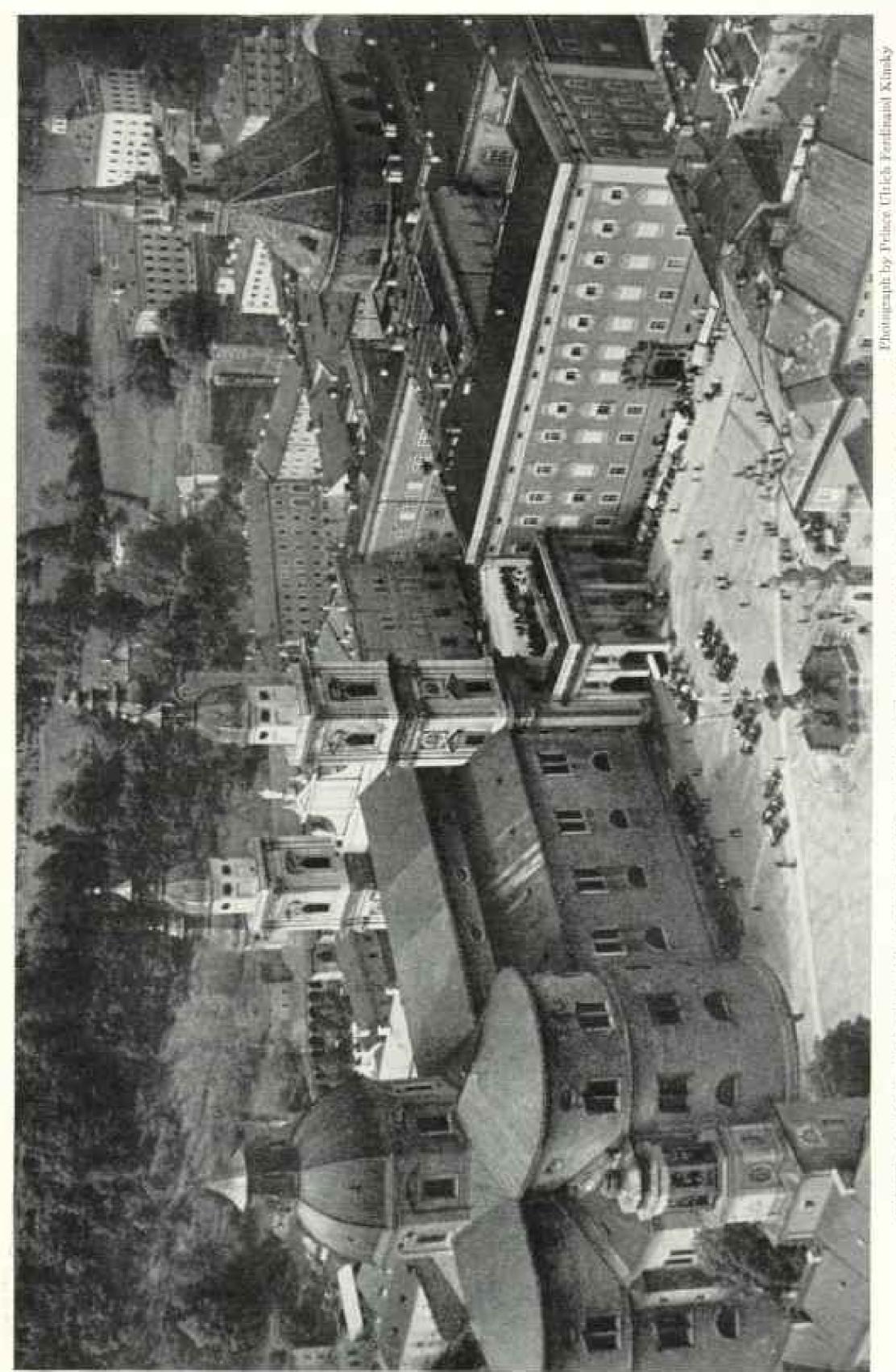
The fine ladies of the town wear what is known as the "gold hood of Linz," as attractive as the "bridal crown" is unbecoming. We called them the "Brunhilde ladies" because their gold-mesh head-dresses resembled Brunhilde's and the old-fashioned victoria which called for them on public occasions reminded us



Secure in their fortress of Robensalzburg, archbishops held sway, here from 798 until 1903, when the Salzburg See became part of Austria. Flowing down from glaciers, the Salzach River cuts in two the former Roman tradition post, whose present mans from local salt deposits. Reyond rises the snow-capped Unters Berg. HE CITADEL WHERE PRINCES OF THE CHURCH RULED A RICH DOMAIN.

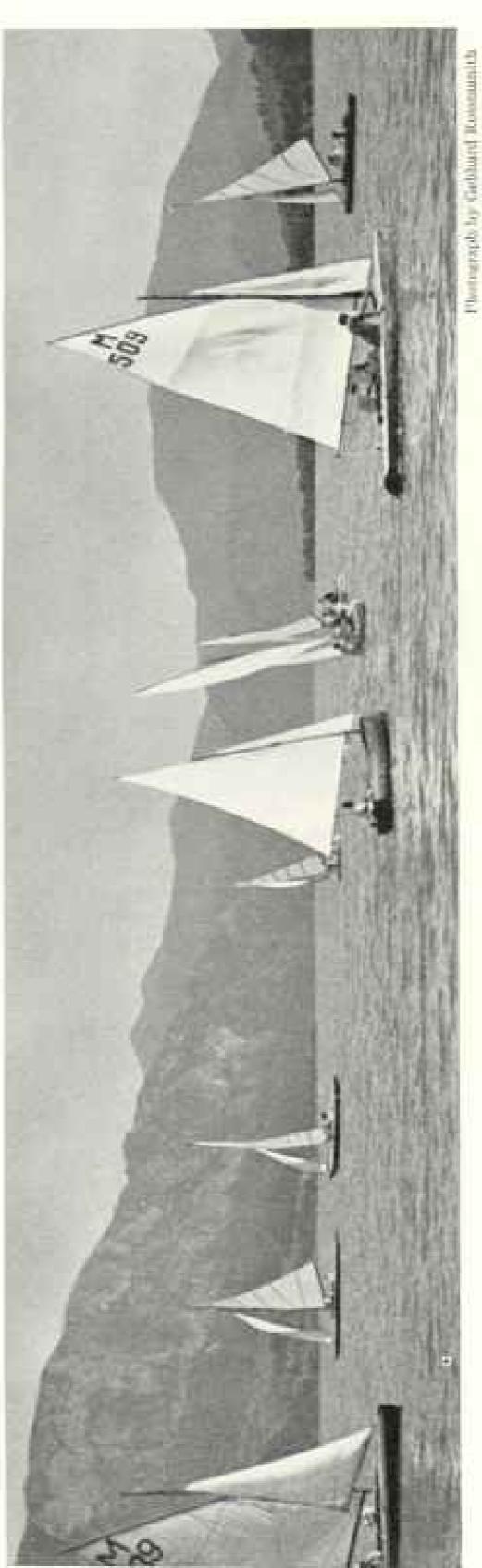


Hell Mountains (Höllen Gebirge) rise almost sheer above the Atter See, in the background. Like pocket handkerchiefs drying in the sun, small farms cling to the narrow shore of the Mond See, left center. The village of Mondsee, where the author visited, is at the apposite end of the lake. FROM THE AIR, THE SALZKAMMERGUT SEEMS POCKED, AS IF A DIANT HAD SCOOPED OUT VALLEYS AND SCATTERED AQUAMARINES

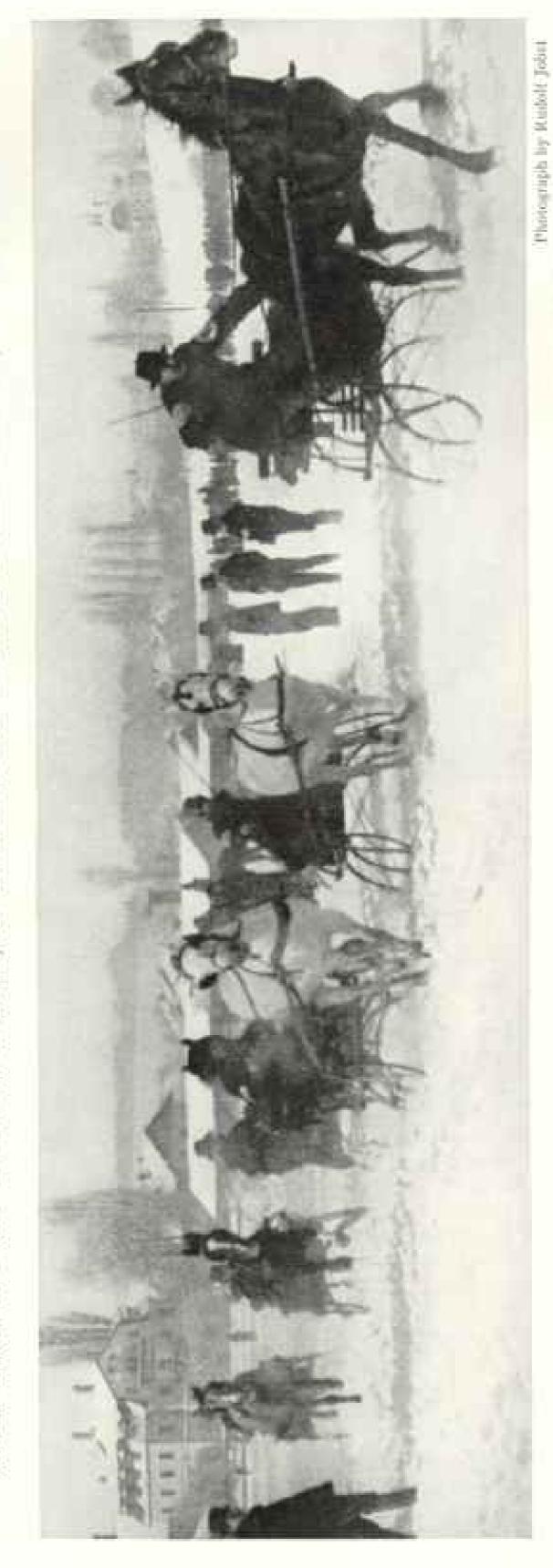


WHERE MOZART PLAYED FOR ARCHITISHOPS, SALZBURG'S PAMOUS MUSIC AND DRAMA FESTIVAL IS STAGED TODAY

Born here in 1736, the boy componer often took part in court concerts in the palarial Residenz (right), one-time home of the city's ecclesiastical rulers. So monoton non-time home of the Jupiter Symphony wrote: "I hate Salaburg and unpleasant was his life as the archbishop's munician that the center of The Mapie Flate, Don Glovanni, and the Jupiter Symphony wrote: "I hate Salaburg and everybody in it." Spectators gather in the courtyant (center) before the Cathedral, to watch a performance of "Everyman" (pages 466 and 472-3).



SEE, LARGEST AUSTRIAN LAKE WINTER SPORTS GIVE WAY TO SUMMER REGATLAS, AS YACHTSMEN RACE ON THE BLUE-GREEN ATTER



SEE KNOW "WHAT FUN IT IS TO RIDE IN A ONE-HORSE OFEN SLEIGH" RACERS ON THE PROZEN TRUMER



Publishers Photo Service

COWS AND FAMILY GREET VISITORS COMING UP THE PATH

Hospitable farm wives treat callers to honeyed butter with bread and milk, and ask them to sign the guest book (page 456). Roomy and comfortable is this Zell am See home, with overhanging caves, hand-carved balconies, and roof shingles held in place by heavy stones. More pretentious is the house with the tall weather vane, farther up the hill.

(page 467).

Around their shoulders were draped lovely old Kashmir and Paisley shawls, handed down, like their golden hoods, from generation to generation.

The men are equally proud of the antiquity of their leather breeches, which, with the curious suspender and embroidered leather belt, are passed on from father to son. Where our gentility gives up its family silver and oil paintings in bad times, the Mondseer wistfully hands over to the antique dealer his leather belt and embroidered suspenders, or her golden hood and Kashmir shawl.

All adhere to the custom of wearing the local costume, men and women, old and young, archduke and farmer, countess and kitchen maid. At Innsbruck, the capital of Tyrol Province, the initiated can tell at a glance from what district any native outsider has come. Whenever you see two but-

of the chariot used in the Wagner opera tons at the back of a woman's waist and a bias band around the bottom of her gingham dress, you know she belongs to the Salzkammergut.

VISITORS WEAR NATIVE DRESS

The native costume is the summer resident's first purchase. You can't wait until you have the thing complete, with all accessories. It also simplifies your wardrobe. A change of apron is a transformation. The natives do not resent your usurping the traditional garb; in fact they are only too willing to help you (page 471).

"It matches," says the friendly little shopkeeper in German as she runs with you to the door to see if the braid of your blouse harmonizes with the plaid of your dress. If it doesn't blend, she says with a slight frown of disapproval, "It matches not," and another choice has to be made.

Of course, if you wish to be very swank,



Photograph by Ewing Galloway

A "BEEHIVE" STOVE IS THE ALPINE CENTRAL HEATING PLANT

Logs are burned in it so effectively that a five-minute blaze makes the glazed tile bumps too hot to touch. A farmer's family of Zell am See lives in the one large room, decorated with colored panels, old china and pottery, and chamois and roebuck heads. Hay and grain may be stored in the adjoining room.

you march straight into one of the wellknown sport shops at Salzburg and order a costume outright. You can have a Diradlkleid (dress), blouse, apron, and Upper Austrian coat trimmed with braid and silver buttons made to order for ten dollars. At least you could two years ago.

Only don't be in a hurry for it. Their clientele grows by leaps and bounds, and, being Austrians, they can't bear to say "No." Sometimes you do not see your peasant costume again until you are ready to leave for America.

At the last minute, after having waited all summer, with your bags already on their way to Le Havre or Bremen, you storm into the shop, white with rage, for it is now September!

"Where is the suit I ordered last June?"
you demand in your most impatient manner. "That suit about which I have written
you every week and which you promised
to send me long ago?"

"Oh, your suit." And the prettiest girl you ever saw goes to fetch it. She is gone a long time and comes back a little crestfallen. The coat, sleeveless and without a lining, is just as you left it at the second fitting.

"We're so sorry," she says, "but if you are in a great hurry, we could have it for you tomorrow."

"Tomorrow!" you cry. "I'm leaving for Paris in an hour!"

"Oh, in that case," she answers, nothing daunted, "we could send it to America after you."

You try to picture yourself walking down the main street at home in an Austrian costume. Or, rather, you couldn't have pictured it two years ago. But times have changed. A famous Salzburg shop now has a branch in New York just off Fifth Avenue, and no less a person than the proprietor himself goes back and forth several times a season with metropolitan orders for Austrian outfits. And more and more one meets dresses, suits, hats, and shoes which come closer and closer to those we coveted in Salzburg.

My first night at Castle Mondsee was one to remember (page 475). The state bedroom was the largest bedroom I had ever seen. How cramped Napoleon must have felt when he got back to narrow quarters at Fontainebleau!

There were 27 pieces of furniture, including three enormous inlaid mahogany wardrobes, nine beautifully upholstered chairs, two dressing tables, chaise longue and prie-dieu. And much more, But nothing was crowded.

NAPOLEON'S BED TOO SHORT FOR THE GERMAN CROWN PRINCE

I tucked myself away in the bed that had once been used by an emperor. I should say emperors, for Franz Josef came here too. This room was also occupied by the former German Crown Prince on his visits. And wasn't be surprised to find that this time it had been given to an American!

"Oh, I don't care," said the tall prince in fluent English. "I never liked Napoleon's bed, anyway. It was always too short for

me."

I liked everything in my room except

the plumeau.

A plumeau is the Continental substitute for regular bedclothes. It consists of a thick, feather-stuffed quilt, usually Burgundy-colored so as not to show the soil, around which the top sheet is buttoned. It sits on the lower sheet like a pancake and cannot possibly be tucked in anywhere.

If you are too warm and throw it off, you have thrown off everything. If you are cold and instinctively draw it up to your shoulders, your toes are sticking out in the chill air. And your nights are spent in trying to keep it just where it belongs.

But otherwise life is very simple in a town like Mondsee. For the natives it centers around the church and the market

place.

The Church is active here—almost as busy as it was in the days of the monks. There are five or six services a day, beginning at 4:30 in the morning. The first time I heard the great bells tolling at this unearthly hour I thought the town was on fire.

But there was only a scant scuffling of feet across the market place and no intimation of a disturbance. So I just ducked under the plumeau to get away from the deafening bells and waited. Much later I learned that people were merely going to service.

The peasants, extremely devout, go to church religiously. During the day they tend their farms and raise their crops, working in the fields until twilight (page 468).

The farmhouses, partly stone, partly frame, are large and square, with over-hanging eaves and hand-carved balconies. Sometimes they are all white, with rows and rows of bright-colored window boxes full of gay flowers. There is always an equally square and comfortably sized barn, either adjacent to, or attached to, the house. The impression is that of cleanliness, of good husbandry, of moderate thrift, and, above all, of peace and contentment (Color Plates III and VI and page 454).

If you stop at one of the farmhouses you will invariably be treated to honiger (honeyed) butter with bread and milk. You may be asked to write your name in an improvised guest book. And you needn't be surprised if the farmer has seen something of the world, himself, and has even been to New York.

NEARLY EVERY FARM HAS ITS CHAPEL

Near the entrance to the farm you notice the tiny stone chapel which almost every farmstead boasts. It is immaculate in a coat of white paint. The blue and white Madonna and the cloth on the home-made altar are spotless, the flowers in the vases always fresh. I never saw artificial flowers in an Austrian church.

The slopes which run down from the hills to the road are crowned with rich, luxuriant conifers. Against the dark skyline of spruce and fir, larch and pine, bright patches of grain are laid out in narrow rectangular plots. They fall away from the roots of the trees in precipitous descent, tumbling into the road below like variegated strands of ribbon.

How the peasants manage to plow, sow, and reap these almost perpendicular inclines was a constant source of astonishment to me. And yet three crops of hay are often reaped in a season.

In the fields and at the crossroads stand covered crucifix shrines which remind you of the calvaires (calvaries) of Normandy. Sometimes you come upon them in the forests or on the summit of a mountain. They are an integral part of the landscape. In the summer you will

AN AUSTRIAN ALBUM



National Geographic Society

Autochrome Lumière by Hans Hildenbrand

TALES OF RICHARD THE LION-HEART STILL ARE TOLD IN DURNSTEIN ON THE DANUBE

Mothers resting with their children by the fountain in the Abbey courtyard tell how the warrior King of England, homeward bound from the Crusades, was imprisoned in the eraglike castle high above the town. Legend says he was found when the faithful troubadour Blondel, wandering through Europe in search of his King, sang a familiar song beneath the castle windows and Richard sang it back to him. These tolk costumes, worn on special occasions, have been handed down, like the story, for generations. In an Austrian castle at Enzesfeld, some 43 miles from here, the Duke of Windsor stayed with friends.

THE NATIONAL GEOGRAPHIC MAGAZINE



Agricolor Plate by Hans Hildenbrund

A MARBLE MONUMENT RECALLS THE PLAGUE THAT STALKED THROUGH VIENNA IN 1679

Emperor Leopold I erected the Trinity Column on the Graben in gratitude for the city's deliverance, and included his own likeness along with the Holy Trinity, angels, and billowing clouds. The Graben, meaning "moat," now a principal street, once marked Vienna's southwest boundary.



O National Geographic Society

Autochrome Lumière by Hans Hüdenbrand

GAY, GOOD-HUMORED, THEY TYPIFY VIENNA'S FAMED "GEMUTLICHKEIT"

The word is used as a toast or greeting to suggest good nature, kindliness, or joviality. The neat, kerchiefed proprietress of this fruit stand sells most of her wares by the quarter-kilogram (about half a pound). What looks like "Il y " on the signs is really 34.

AN AUSTRIAN ALBUM



CATHEDRAL-LIKE MOUNTAINS, OLD HOUSES IN QUIET VALLEYS-THIS IS THE TYROL.

The might of Austria's former Hapsburg Kaisers is suggested by the rocky, pinnacled Wilder-Kaiser, seen here from the town of Ellman. It forms the southern range of the Kaiser Gebirge, near the German boundary. Half stone, half unpainted wood is the farmhouse, topped by a cross and bell.

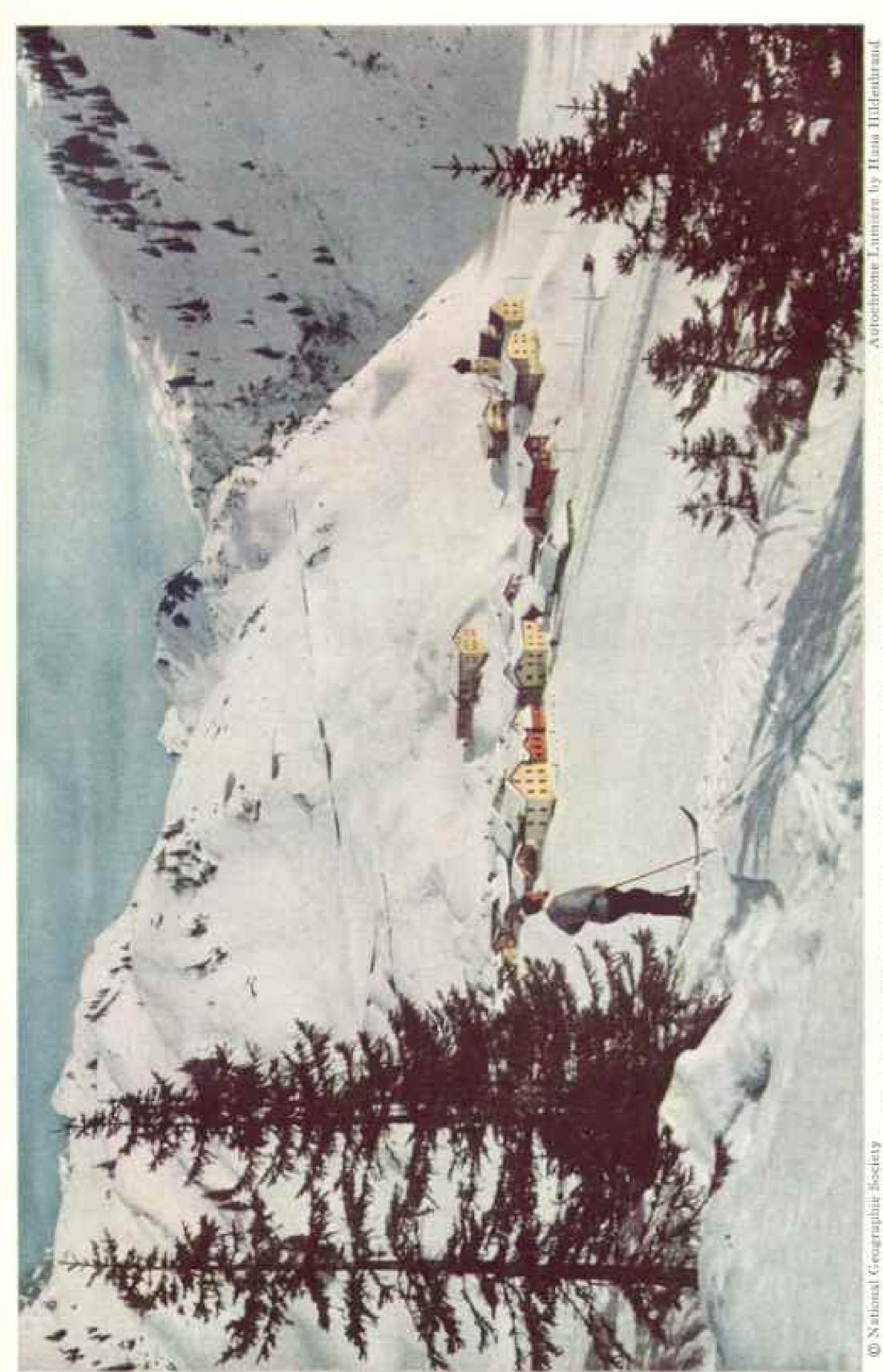


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A SQUAT OLD TOWER WITH FOUR-FACED CLOCK GAZES DOWN AT BUSY GRAZ

Below the Schlossberg, or Castle Hill, spreads Austria's second largest city, capital of the rich Province of Styria, with its iron mines and mountain vacation land. Graz, straddling the River Mur, makes machinery, bicycles, wagons, beer, linen, and leather goods.

111



WINTER COMES TO STUDEN, IN VORARLBERG, A LITTLE AUSTRIAN PROVINCE NEXT DOOR TO SWITZERLAND

Visitors wing their feet with skip and slide down slopes as easy as that in the foreground or as dangerous as those that rise above the snowy roofs and the onion-shaped steeple of the church. Stanting up the mountain beyond the road to the Arlberg Pass, beneath which runs the Paris-Istanbul express in a 6½-mile tunnel.



© National Geographic Society HERE COMES THE BRIDE, MITTELBERG

STYLE

Entering the church, she wears a top-heavy hat of artificial flowers. Women's gurb varies from valley to valley, but characteristic of most is the large number of voluminous petticoats. To the right of the church door hangs the holy-water font.



A BIT CHILLY FOR A TETE-A-TETE:

Such a scene might have been pictured a century and more ago, except for the modern water fancet and high beels. This young married couple of Rieziern wear the time-honored folk costumes. He is proud of his gay belt, six inches wide, she of her brightly embroidered apron.

THE NATIONAL GEOGRAPHIC MAGAZINE



SHIRT-SLEEVED AND EVEN SHIRTLESS, THEY GO SKIING

These mountaineers are more in danger from sunburn than freezing, for the sun is warm on the clear, lofty heights of Vorarlberg. Beyond them, seen from the Ulmer Hütte, are the Fervall Group and the Riffler



National Geographic Society

Autochromes Lumière by Hans Hildenbrand

LOVERS OF WINTER SPORTS INVADE THE EASTERN TYROL TOWN OF KITZBÜHEL

So many come from England and the United States that anyone depending upon ears alone might think it an Anglo-Saxon village. But typically Tyrolese is the paintless old house, with its overhanging balcony and its bell which calls skiing parties home from the hills at mealtime.

AN AUSTRIAN ALBUM



Autochrome Lumiere by Hans Hildenbrand

A QUIET TRYSTING PLACE IS THE OLD FOUNTAIN IN ST. WOLFGANG.

It stands beside the church and is topped by a silhouetted figure with bishop's crosier, or staff. Bishop of Ratisbou and missionary to the Magyars, Saint Wolfgang, for whom this Upper Austrian town is named, lived about 1,100 years ago.



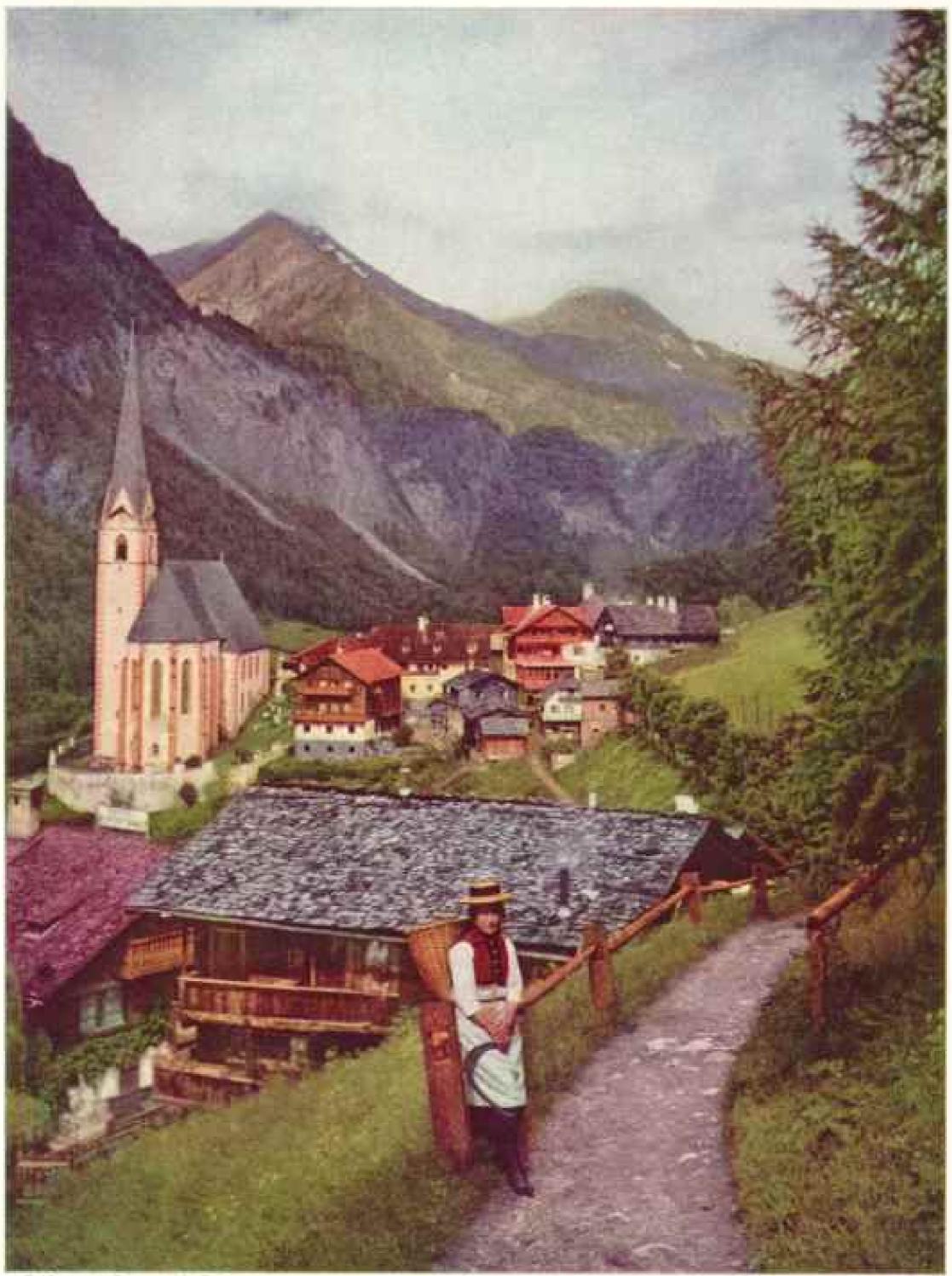
D National Geographic Society

Autochrome Lumière by Wilhelm Tobien

TO THE STRAINS OF ZITHER AND HARP THEY DANCE THE TYROLESE CLOG

Son and daughter, father and mother, all wear versions of the national dress. With his footless socks and chamois-leather shorts, this modern young man of Aral is probably attired much the same as was Josef Speckbacher when, nearly 130 years ago, he fought for Tyrolese independence.

THE NATIONAL GEOGRAPHIC MAGAZINE



D National Geographic Society

Autochrome Lumière by Hans Hildenbrand

HEILIGENBLUTS 15TH-CENTURY CHURCH POINTS A SLENDER LATE-GOTHIC FINGER SKYWARD

The town takes its name from the "Holy Blood" reported to have flowed from a picture of Christ when it was stabbed by a fanatic. Traditionally, the blood was brought here in phials from Constantinople by Briccius, a Dane. Though Heiligenblut retains its Old World air, it lies on a modern motor road which leads through the glacier regions near the Gross-Glockner, Austria's highest mountain. In this view the peak is hidden by low-hanging clouds.

see standing in the fields of grain little sticks of evergreen and flowers—blessed at Easter-sentinels of faith, bleached and faded though they are.

ROADSIDE PICTURES RECALL OLD TRAGEDIES

More interesting to the stranger than the shrines are the Marterls, or memorials, set up along the roadside, commemorating accidents and miracles of the neighborhood. They are usually colored pictures done in oil, very crudely, framed in glass, and protected by a little wooden roof.

One depicts a small boy who has fallen through the ice. His companions struggle in vain to rescue him, while haloed angels hover overhead, waiting to bear his released soul to its heavenly reward—a simple

story without need of text.

Another shows a horse prostrate beneath a heavy load of wood in the heart of the forest. On the faces of the peasants is painted overwhelming consternation. But lo, from the skies comes the miraculous present of a fresh horse to take up the burden. There is no sacrilege here, and the passer-by would like to believe that it happened so.

A memorial that I remember in detail and even copied, because it was particularly naive and innocent, pictures a blue-robed Madonna serenely seated in the heavens, looking down upon a dismal scene below. In the background are the mountains hemming in the waters of Mond See. In the foreground is an abandoned rowboat drifting drearily along the marshy edge, while underneath is inscribed in German the following lugubrious narrative:

"On the first day of March, 1877, Johann Schweizhofer was returning with some friends by bout from Mondsee to Plomberg. Suddenly the hat of his friend, I. Graf, fell into the water. Johann, leaning out to recover it, was precipitated overboard and was drowned, although he was a very good swimmer. Pray for his soul."

Another and well-known instance of romantic sentiment about casualties of the past is the Kreuzstein in the Mond See

(page 485).

A hundred years ago, the story goes, a bride and groom, together with their parents, pushed off from the shore in a small boat. When they had gone only a little way an enormous mass of granite from the overhanging Schaf Berg fell on them, crushing them all to death. A cross was erected on the huge rock which stands in the water just as it fell, and scarcely a day goes by that some peasant does not bring a floral offering to the Kreuzstein.

The picturesque countryside has an added allure in the sheer profusion and beauty of its wild flowers flowers which are almost invariably blue and lavender

with a sprinkling of yellow.

Here are scented harebells as large as our cultivated Canterbury bells. streets of the villages give upon fields studded with blossoms; the gentian, lupine, wild pea, spirea, and toudflax border the roadsides; myriads of forget-me-nots follow the furtive streams, while the upland meadows abound in rare flora, the pursuit and delight of botanists.

The trains go slowly through the Salzkammergut so that the visitor may drink

his fill of scenic beauty.

MOZART FOUND INSPIRATION HERE

This is the country in which the young Mozart grew up, and if it is true that he found the city of Salzburg intolerable under the patronage of Archbishop Hieronymus, who made his music-director's life such a burden, how he must have warmed to these lakes and crags and blossoming fields as a refuge and escape from his irritating lord! His music is filled with the impersonal beauty of the landscape itself and reflects everywhere its serenity and stately charm.

The townspeople in the Salzkammergut are busily occupied with shops and inns, soliciting the trade of the summer residents with all the resources at their command. In the evenings they come out to the gaily covered tables set on the sidewalk, and over their tankard of beer they laugh and chat

with their neighbors until bedtime.

Every Saturday night in summer a motion picture is shown—a good one, too, often an American or English film. The hall, or Kino, is minute. But the innate dignity of the Austrian invests it with all the formality of an up-to-date Parisian cinema. You choose your place outside from a chart and only in that place may you sit.

At the Pause, or intermission, refreshments are served, including ice cream, cake, candy, and Himbeer, an unfermented raspberry sirup. It is something more than just a movie.

On Sunday nights in midsummer an open-air performance of the famous old



Photograph by Herta Hanslik A ROOK IS WHITEBEARD'S CRONY

The old man greets passers-by with a delefulsounding "Morg'n," an abbreviated form of "Good morning" which seems to be the prerogative of elderly people. Birds, dogs, cats, even pigs, are often members of a Tyrolese household. morality play, "Jedermann" (Everyman), is given by a local cast. In Mondsee the same players carry on year after year, just as the Passion Players at Oberammergan do.

DEATH STEALS THROUGH THE TREES

"Jedermann," also known as "The Rich Man's Feast," depicts a samptuous banquet given by a rich and worldly man to honor his mistress. Everything goes happily until the one grim guest, who came uninvited, appears. It is thrilling to see Death creeping up the stairs of the Salzburg Cathedral, all unnoticed by the merry-makers. But it is equally realistic to watch him steal through the dark evergreens at Mondsee (pages 472 and 473).

At the sight of Death standing beside the rich man, all the guests flee in terror, even the three poor relations who fared badly straight through the feast. The rich man in despair finds that only Faith, Hope, and Charity are left to follow him to the

grave.

Once a month "Jedermann" is performed by a group of youngsters who are being trained to take their elders' places. At high noon, on Sundays, two boys dressed as medieval heralds stand in the market place, and from bugles draped with the flag of Austria they play the traditional tunes which announce the forthcoming performance.

On pleasant week-day evenings certain ambitious and patriotic young men go down to the lake front and practice the Schuhplatteln, a slap dance popular in this part of Austria (page 482).

Every Tuesday night the members of the town hand, looking very trim in their darkgreen uniforms, appear in the market place and regale the rest of the population, which spends its time promenading over the hard stones, with a series of Vienna marches.

The band at Mondsee had a great deal to do. No wedding or funeral could go on without it. In a procession of any kind it always had the place of distinction.

Having escorted a procession to the church door, the members of the band would then hie to a near-by taproom and refresh themselves until a messenger was sent to fetch them. Yet they never gave you the feeling that they were either intemperate or disrespectful. They were just natural human beings taking life as they found it.

Once a year there is a special day when



Plantograph by Volker-Mastalka

WINGED CAPS OF GOLD ARE THEIR MOST TREASURED HEIRLOOMS

Only well-to-do women own these "gold boods of Linz" (page 449), made of silk and gold leaf, "Brunbilde ladies," the author calls them, for some suggest the husom, believed queen of the Wagnerian opera. The gleaming headdress, satin apron, and colorful shawl leave the family treasure thest only on special occasions, such as religious feast days.

every shopkeeper moves his wares outside, in the middle of the market place. There they seem to be more enticing, judging by the crowds that surround them, than they could possibly be inside the rather stuffy little shops.

In Mondsee, where local traditions and customs persist, weddings and funerals are equally interesting, and, strange to relate, equally somber (Color Plate V).

Graf (Count) Almeida had very kindly put at the disposal of those of us who were guests at the Castle the private loge of the Wrede family. From a corridor of the Castle I could walk straight into the second floor of the church.

The loge was painted in cream and gold, with kneeling stools of red velvet plus a few finely upholstered chairs. It had five casement windows which gave on the church and from this vantage point the occupants could see everything going on below.

On the other hand, by closing the windows they could be entirely cut off from the service—and there must have been times when this seemed immensely preferable. Under cover of attending Mass, lovers could whisper here without fear of intrusion. And no one knows what deep political plots were worked out in this regal box!

A BRIDE WEARS BLACK

The first thing I noticed about a wedding was that the peasant bride, for some unaccountable reason, discards her lovely, bright, and extremely becoming native costume on her wedding day and substitutes for it an ill-fitting black alpaca coat and skirt.



Photograph by Kurt and Margot Lubinski

NOT EASILY STOPPED IS A LOADED HAY WAGON ON A STEEP ALPINE PARM

The grizzled Salzburgers halt their sleek oxen on a tiny meadow that slopes down from a wooded peak. A double eight-hour day is the rule here. The rigorous life makes the men look like patriarchs, but probably neither is much more than 50 years old. This load of hay will help feed the oxen and dairy cattle during the long winter.

When the one bired vehicle rattles down the main street, bringing the prospective bride and groom to the inn where the procession forms, only the horse, whose tail is braided with roses, has the mark of festivity.

The procession is simple. A few little girls precede the bride. A single-attendant walks beside her. The prospective groom walks solemnly with the priest. On entering the church the bridal couple go up into the chancel and take their places on a hard bench. They leave it only for the ceremony of the ring. There they sit for two hours or more without exchanging a glance, while the Mass is celebrated and a long discourse, filled with the most detailed admonitions, is read to them.

Once I noticed a bride take out her powder and puff—it seemed that Mondsee wasn't too naive for this vanity—and smother her tears during this ordeal. Yet I was told afterwards that she was proud and happy in spite of her tears.

When the wedding is over, the bride walks back to the inn, not with her hus-

band, but with her woman attendant. The bridegroom, looking as serious as ever, accompanies the priest.

Then, in a stuffy upstairs room which they have hired at the inn, the couple are obliged to sit for twelve more hours while their friends and relatives dance, smoke, eat, and drink. All the time the room is getting more suffocating from the dust of stamping feet and the combined odors of tobacco smoke and perspiration,

THE TOLLING OF FUNERAL BELLS

A funeral, of course, is a most important and dignified event. On the day of a funeral the great bells are tolled by friends of the dead. If the person who has died is a child, the bells are tolled by children. And so heavy and powerful are these bells that the children are lifted off their feet as they pull. But to ring the bells is considered a great privilege.

Then comes the procession—on foot. No riding through the

streets in automobiles in this part of the world. The procession marches from the house to the church, and again, after Mass has been celebrated, from the church to the Friedhof, or "garden of peace," as the Germans so touchingly call a cemetery.

In this procession are, first, the Sisters of Charity, then the priests, acolytes with crucifix and censers, various organizations, the band and the "Brunhilde" ladies in their gold hoods, the mayor and other officials of the town, the family and friends,



Photograph from Florence P. Holding

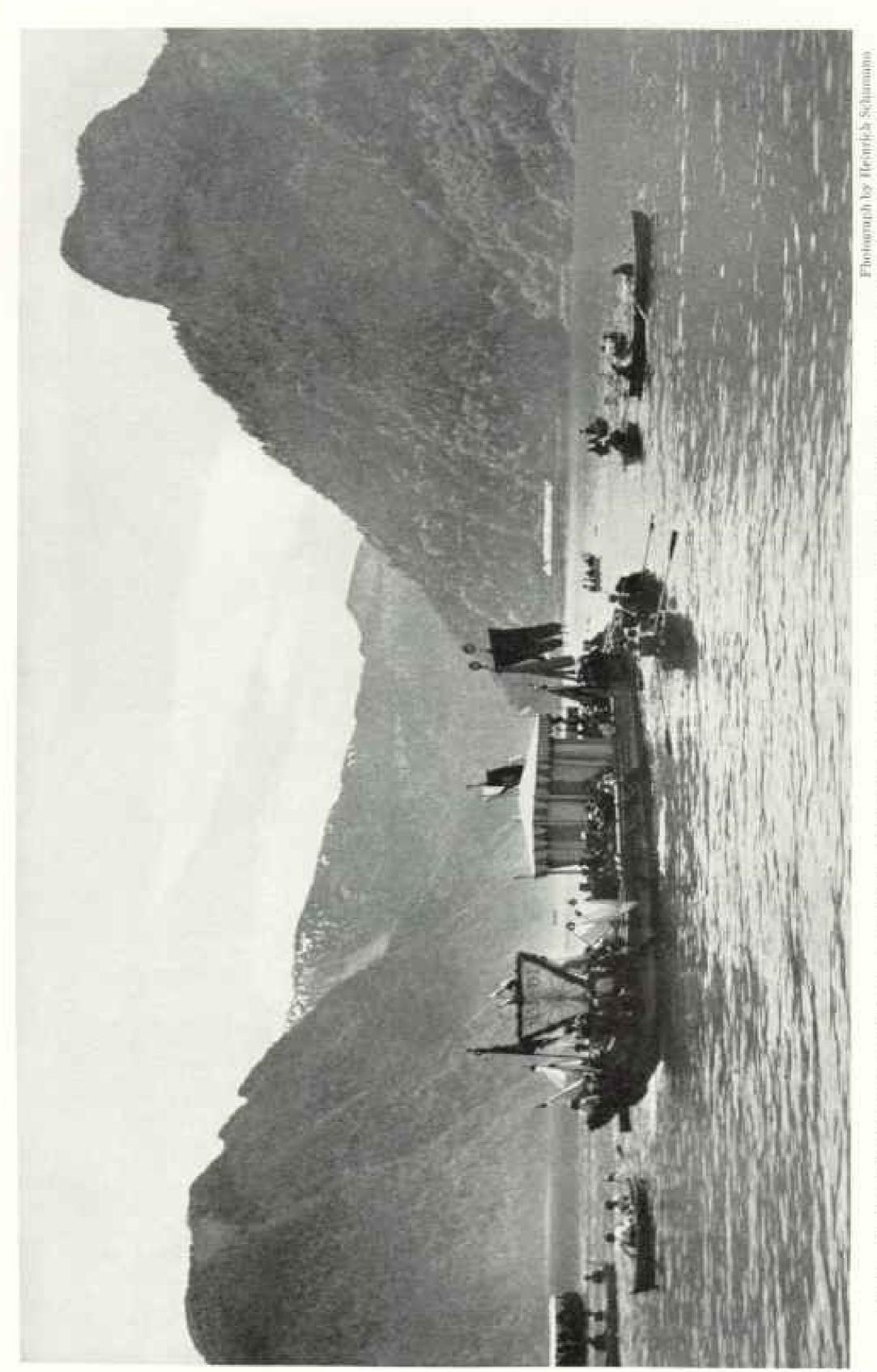
SOMBER MATRONS DRESS MAY ACCOUNT FOR INFREQUENT WEDDINGS IN MONDSEE!

On Sundays and religious holidays, farmers' wives don the black, glazedlinen "bridal crowns," with folds hanging down each side like elephants' ears, in contrast to the gay gowns and hats of young girls. The author heard of only two weddings in the two summers she visited here (p. 449).

> Before the church service the floral gifts to the stricken family are set up on easels along the sidewalk in front of the house. He who passes may not only stop and look at the flowers and smell them, but he may also read all the messages of condolence if he wishes. In fact, he is expected to.

> When it is time for the procession to leave the house, the floral pieces are gathered and set up a second time in front of the church.

The coffin is brought to the porch of the



ROW THE HOLY SACRAMENT ON A FLAG-DRAPED BARGE ACROSS THE TRAUN SHE WITH SOLEMN, RHYTHMIC CHANTS, VILLAGERS

Country folk, dressed in their Sunday best, cluster in small boats around the colorful craft in a centuries—old Corpus Christi procession. Priests guard the Eucharist on a dail, fringed with gold, inside the tentilike pavillon. Sailing from the village of Traunkirchen, the worshipers cruise on the lake, then return, disembark, and march to the church, singing. A similar procession is held annually at Hullstatt (page 484).



A MONDSEE COSTUME INCOMES THE AUTHOR

First purchase of most tummer residents in the Salakammergut is a native outfit: a skirt of the local plaid, and a linen jacket and apron trimmed with brakl and silver buttons (page 454). Veiling the house with the overhanging roof is a pear or apple tree, which is espaliered, or trained on a trellis like a vine.

"SO THIS IS WHAT BRINGS PORCIONERS HERE!"

Carrying cam of milk to sell in the town, youngsters from the country gaze at photographs of familiar scenes that atteact thousands of visitors every year to Heiligenblut (Holy Blood). The third picture from the bottom (left) shows the 12,461-foot Gross-Glockner, Austria's highest peak (Color Plate VIII).



Photograph from Florence P. Holding.

FOR "EVERYMAN," THE MEDIEVAL DRAMA, SALZBURG CATHEDRAL AND MOUNTAIN PEAKS FORM A MIGHTY BACKDROP

The famous old morality play, produced by Max Reinhardt, is performed during the summer on a stage before the rose-and-white marble façade. Here dancers file in from both sides to entertain the guests at the rich man's feast (page 466). In the audience, church dignituries in red hats and cassocks occupy the front rows.



Photograph by Ellinger

DEATH COMES TO THE RICH MAN'S FEAST IN THE "JEDERMANN" PLAY

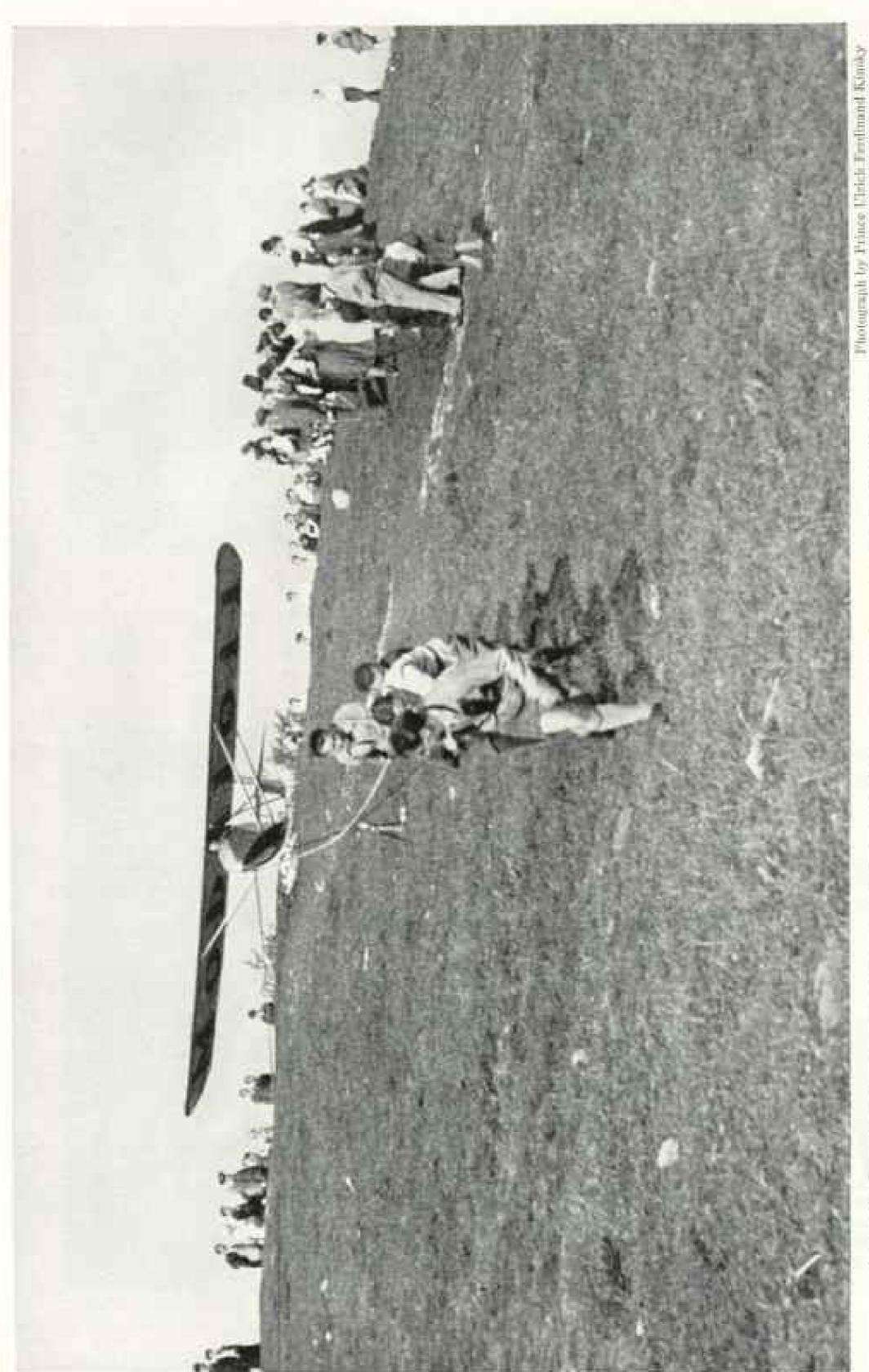
Silently the grim visitor crept up the steps of the Cathedral to the stage, unnoticed by the revelers at the banquet table. Feeling his presence, the doomed host rises in terror. Guests are agape with fear. First to flee is the rich man's mistress, seated at his right. Soon all forsake him except Faith, Hope, and Charity, who accompany him to the grave as "Everyman" ends.



Photograph by Kurt and Margot Lublinki

SNAILS, FOR EATING, BRING TWO CENTS A POUND

A Tyrolese farmer, who gathered them in his vineyard, eyes the scales as a hagful of the tasty mollusks is weighed by a buyer from town. Stacked behind are the ventilated cases in which the shipment goes to market. In France, smalls are specially fattened for table use. After souking for eight hours in a salt solution, they are boiled for five minutes, removed from their shells, fried in butter, and served with garlic sauce. Sometimes the small meat is minced, then stuffed back into the shell.



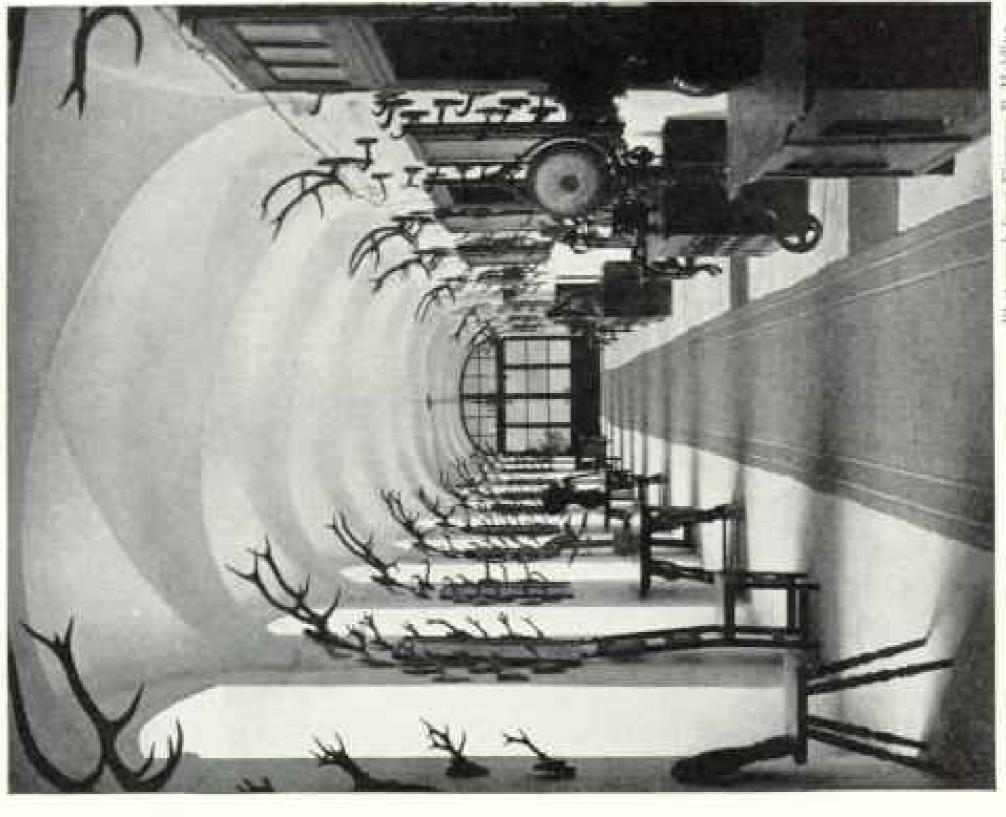
"RUN!" IS THE COMMAND, AS LAUNCHING CREWS HEAVE AT THE RUBBER ROFE WHICH WILL SNAP THE GLEBER ALGET

it falls free after the take-off. Ascending on upward currents of air, the gilder may sour for Bours as the the thrilling sport at a gilder school here on the summit of the Gals Berg, near Salzburg. When the clastic is stretched taut, the plane's tail is released and the motories craft of the double line. Young Austrians learn A socond group of boys, at the left, pulls at the other end shoots into the air. The rope is hooked on in such a way that pilot guides it with rudder and alterons. Young Austrians learn



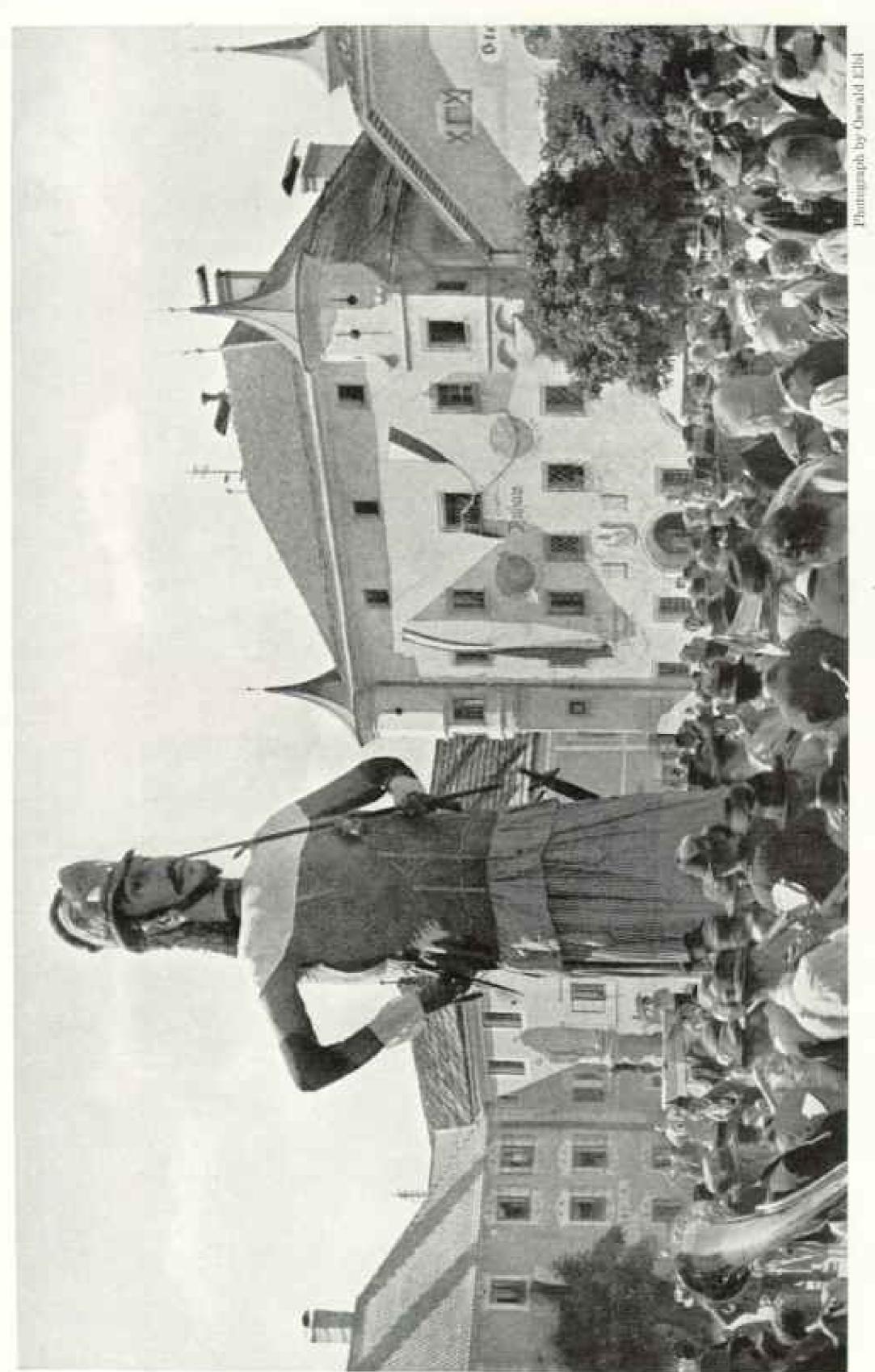
FATHER AND DAUGHTER STACK GRAIN ON POLES

A row of such piles, in the background, reminded the author of a procession of booded monks trudging in single file across the field. Even the younger childeen work on the farm, for all hands are needed to gloun a living from the tiny patch of arable soil,



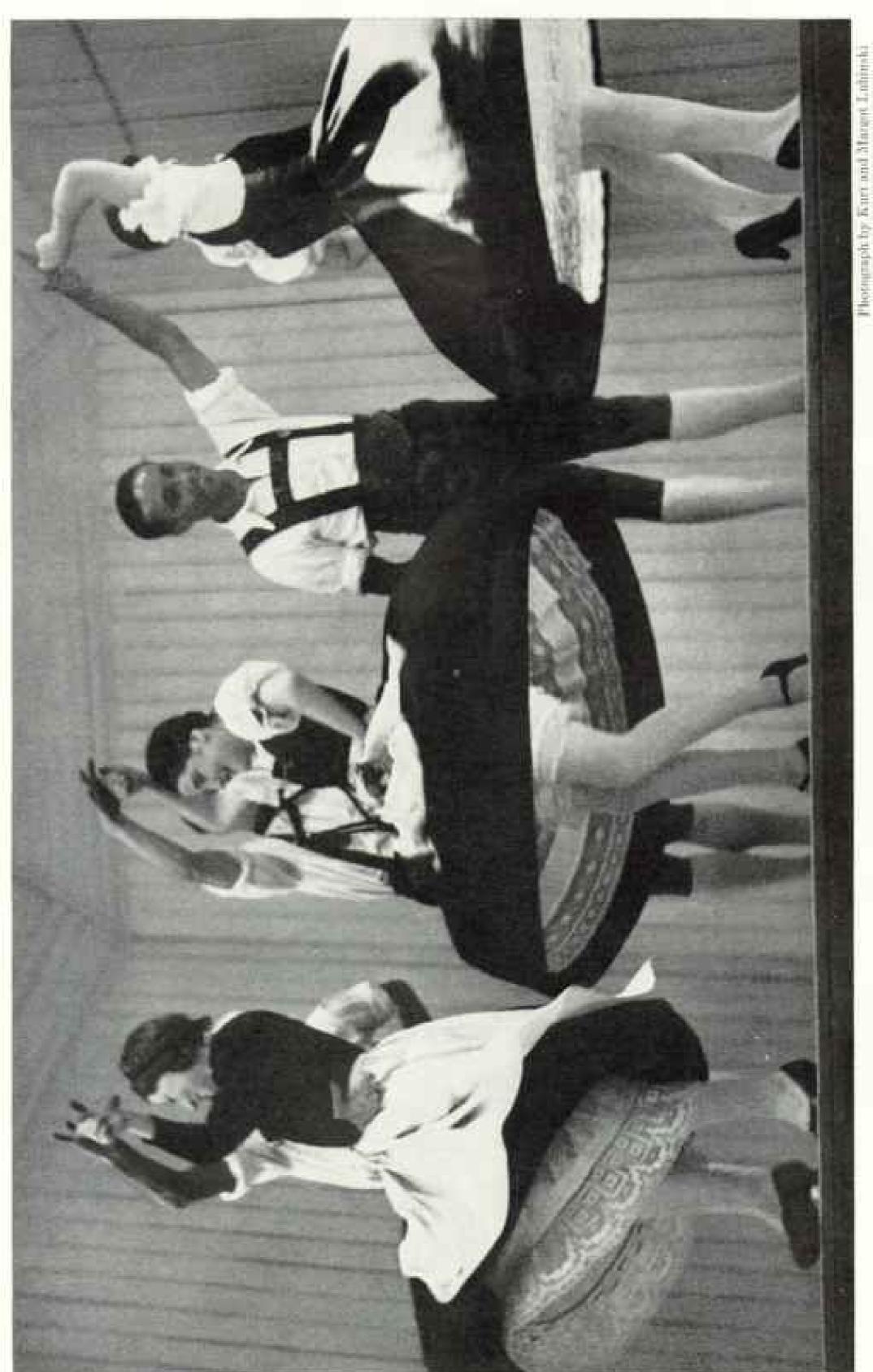
TROPHIES OF THE HUNT BRISTLE IN THE MAIN HALL

Napoleon, Emperer Franz Josef, and the former Crown Prince of Germany have been guesta at Count Almodda's castle at Mondace, once a Benedictine abbey. Under each pair of borns is inscribed the hunter's name and the date. During her visit, the author was given the bedroom where Napoleon slept (page 148),



RED-HAIRED SAMSON, 2% PETT TALL, DANCES BEFORE TAMSWEG'S TOWN MALL ON CORPUS CHRISTI DAN

A busky citizen, invisible beneath the giant's skirts, carries on his shoulders the 180-pound figure with its ifficer belinet, blue tunic, and enormous sword. Escorted by a blaring hand and two dwarfs in grotesque garb, the statue is paraded annually through the village, paying hand and two dwarfs in grotesque garb, the statue is paraded annually through the village, paying hond and two dwarfs by phonetring before their houses. Instead of the Samson procession, some communities of this region stage a fight between David and Goliath (page 448).



GIRLS SPIN, SKIRIS AND PETTICOATS WHIRE, AS DANCERS "SWING IT" IN THE TYROL WAY

To the tune of zithers, horns, and musical saws, agile youths and girls caper and pirouette on the stage of the town half. As the tempo increases, they slap their thighs and boot soles, jump like acrobats, and twist their bodies to the accompaniment of shrill whistles and yodels. Weddings and folk festivals are occasion for strenuous dancing among the fun-loving mountain people.



Photograph by Berta Humini

UP THE STEPS WITH A SWISH OF SKIRTS COME GIRLS TO MEET THEIR BEAUX

Eyes bashfully lowered, but laughing merrily, they hurry from church into the village square. The heavy silk dresses, of gorgeous colors, may have been their mothers'; but the embroidered shawls are presents from their sweethearts. In summer, many an Alpine girl lives alone for months in a mountain but, guarding the family herd in pastures just below the snow line. church and there
placed on trestles,
while inside in
the chancel prayers are said, censers are swung,
and holy water is
sprinkled on a
mere effigy of a
coffin, temporarily erected for
the occasion.

I have yet to learn the reason for Mondsee's departure from the time-honored custom of bringing the body into the church.

At the close of the service, photographs of the one who has died, printed on a neat black-bordered card, together with selected prayers and hymns, are passed out to the friends and relatives.

At all services, including weddings and funerals, two collections are taken. Two men with alms boxes move along the aisles, one a little behind the other. This is, to my way

of thinking, a psychological trick to catch the man with an easy conscience. If he has been reluctant to part with his Groschen the first time, he has an opportunity to repent by the time the second man reaches him.

CHURCH MONITOR WARNS THE INATTENTIVE

Another interesting participant in the services is the monitor who walks up and down the aisles, admonishing the inattentive and light-hearted. His chief victims seem almost always to be very inoffensive-



Photograph by Kurt and Margot Lubioski

"HOW DID YOU GET THE MEDALS, GRANDPAF" THE MINIATURES ASK

"The one to my right shows I was wounded in the World War," the Tyrolese veteran explains. Eagle feathers in his hat attest his marksmanship. Some day the youngsters may wear his old-fashioned costume, with arnate leather belt and suspenders embroidered with the edelweiss design.

> looking old ladies who are indulging in whispered exchanges of mild gossip.

> Sunday is the true holiday, for natives and visitors alike. Even the local train arranges its Sunday schedule to meet the wishes of excursionists.

> Going to the mountains is the principal diversion. With knapsacks called "rucksacks" on their backs, spiked shoes on their feet, Alpine sticks in their hands, a deer or chamois brush in their jaunty hats—if they wear hats at all—and a song on their lips, they clatter along the narrow streets all



Martine, Lublinski Photograph by Kurt mrd

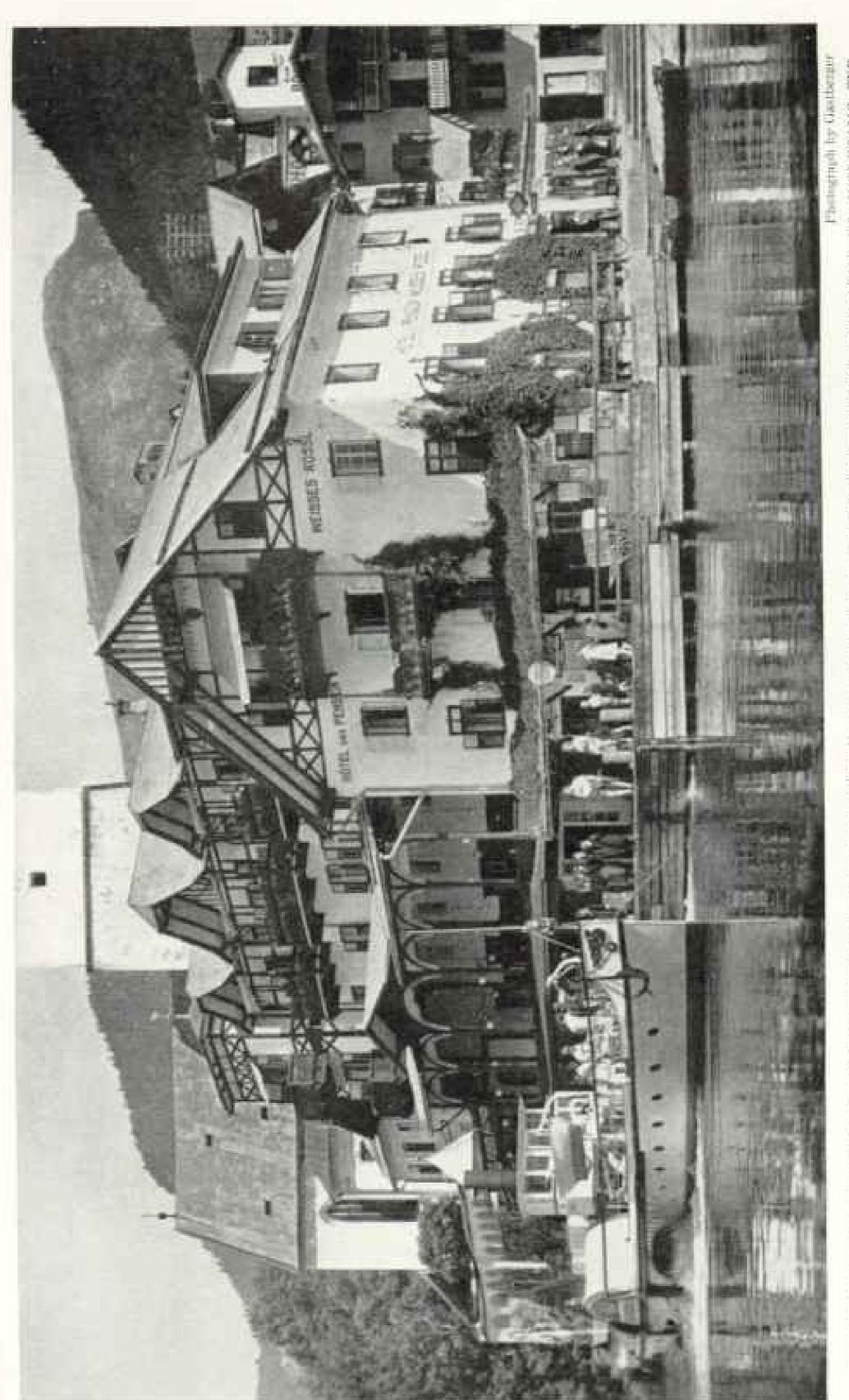
In a special cupboard of this Salzburg beer parlor, the proprietor keeps the favorite steins of his best patrons. Some have allver or pewter covers and are embellished with German sayings like: "If you drink, you die. If you don't drink, you die. So drink!"

FOR EACH STEADY CUSTOMER, A PRIVATE M



Photograph by Holga Glassier FUR HATS AND HANDMADE DRESSES, FOR THE BAND CONCERT

Adorming the fronts are gay flowers, carved bone pins, and heavy silver neck-laces. These ludies of Salaburg hold big, brightly colored "rain-mofs" (um-Seldom made now, such festival costumes often represent a lifetime's work. brellas), and market backets in which they may carry home live chickens or great.



ST. WOLFGANG SEE FLIES THE AND THE LITTLE SIDE-WHERLER THAT INSPIRATION FOR A MUSICAL COMBIN WERE THE "WHISSES ROSSL"

Porters and costumed summer visitors on the wharf, carved wooden balconies, steep mountains—even the lake steamer Front Josef—are all reproduced on the play named for this "White Horse Inn." Opening in Berlin it November, 1930, the comedy has played throughout Europe, and in the Argentine, Australia, Palestine, and the Belgian Congo. One of the touring companies came to the Center Theatre in New York in the autumn of 1956. The real village of St. Wolfgang purches here on a narrow arrip of shore at the foot of the Schaf Berg (page 483).



Photograph by Josef Lebner

IN PLUMED HATS AND LEATHER SHORTS, THEIR EVERYDAY SUITS, YOUTHS CAPER FOR ADMIRING BROTHERS.

In this old folk dance, whose curious steps are handed down from father to son, lads of Hinter-Stoder mimic the peculiar capers and strange sounds made by the blackcock, or male black grouse, when it woos its mate in the mountains. To imitate the bird's flapping wings, as it shows off before the hen, the Schuhplattler dancers leap high into the air and slap the soles of their shoes with the flat of the hand. At the same time they whistle shrilly and make loud smacking or clucking sounds with lips and tongue.

through the night and early morning on their way to the Schaf Berg.

To see the sun rise over the Alps from the summit of the Schaf Berg is unforgettable. If you are not of the mountainclimbing clan, you can take the funicular up to the Schaf Berg the afternoon before and be perfectly happy and comfortable at the very homelike inn on the top.

The visitor can do everything the native does, and more, for all his time is leisure time. He can hire a car and make excursions as far as Königs See and Chiem See, in Germany, and still be back by evening. He can go to Salzburg, which stands at the peak of sophistication as far as the Salzkammergut is concerned, thanks to the annual Music Festival, which has transformed a provincial town into a cosmopolitan center.

I can see more people I know in a day at Salzburg than I meet in weeks in a city like Paris or London.

MUSIC DRAWS THE WORLD TO SALZBURG

In the days when only the guttural voice of the mountaineer was heard in the streets of Salzburg, there was the saying: "He who comes to Salzburg becomes, in the first year, stupid; in the second, idiotic; and in the third, a true Salzburger." And Mozart, smarting from the tyranny of his patron (page 465), once wrote to a friend in a bitter moment, "I hate Salzburg and everybody in it."

But Mozart would no longer have such an aversion to the town of his birth if he could return to it. For it is music which has lifted Salzburg to her present exalted state.

Here people of many nations and climes sit at table with the native farmers in the cool cellars of St. Peter's Monastery. Or encounter Toscanini and Bruno Walter in the more lively out-of-doors Café Bazar, chatting leisurely at bright-colored little tables along the Salzach River. Or, dressed in metropolitan finery and moving among the Arcos and the Hapsburgs, come to rest in an upholstered chair in the more exclusive Mirabell Casino and sip the native Bowle (a spiced wine) while the sensuous music of the gypsy orchestra from Budapest drives the cares of the world away.

When we went to Salzburg to attend the Festival events we routed out our American clothes, but when we went in the daytime we usually stuck to our Tyrolean costumes, feeling less conspicuous and more at home in them.

One of the jolliest things in Salzburg is the Alpinia, an out-and-out peasant entertainment, given twice a week, where you can have your fill of yodeling and slap dancing. Foreigners sit on a platform opposite the stage and one of the innocent tricks of the waiters is to guess your nationality and place what he has decided is the flag of your country in your beer mug. One evening at the big table at which my husband and I were sitting nine different flags were displayed.

Making excursions to the other lake towns, by boat, train, or bicycle, is a favorite diversion. Quite near each other are St. Gilgen, where Mozart's sister and mother lived, St. Wolfgang, Strobl, and Bad Ischl.

Bad Ischl formerly was the summer residence of the Emperor Franz Josef, and because of its fine climate and health-giving springs, a meeting place, in the old days before the war, for the nobility of Europe,

DON'T SIT ON THE GRASS!

It still is a beautiful and interesting place where people continue to take the cure, listen to open-air concerts, walk in the royal park (only, mind you, don't sit on the grass!) and congregate at Zauner's for five-o'clock tea. But here they drink coffee instead, richly reinforced by pastries and ices.

St. Wolfgang, on St. Wolfgang See, is charmingly approached by the boat which goes over from St. Gilgen and around by Strobl. It has the most festive and gay appearance of all and really stands halfway between the sophistication of a town like Bad Ischl and the utter lack of it in a town like Mondsee (Plate VII and page 481).

The first thing you do, and you are almost compelled to do it, is to see the church and the beautiful hand-carved high altar done by Michael Pacher of Bruneck in 1481. This is St. Wolfgang's pride and joy.

HERE STANDS THE ORIGINAL WHITE HORSE INN

Then you stop for a bite at the Weisses Rössl Inn, now internationally famous because of the musical comedy which was written around it. Under its English title, "The White Horse Inn" has been delighting audiences in New York (page 481).

At St. Wolfgang, if you object to climbing, you take the funicular railway to the top of the Schaf Berg, nearly 6,000 feet high. And while you are waiting you can dance the tango to very good music outside the hotel by the boat landing.

The cycling is excellent. The doctors and the priests make their rounds on motorcycles. The bathing is delightful when the weather is good.

Several of the towns have yacht clubs and the fishing is always fine, even though Government-controlled. You have to take an inspector with you when you fish and he not only charges you for his time but for the fish you have caught—if you still want them!

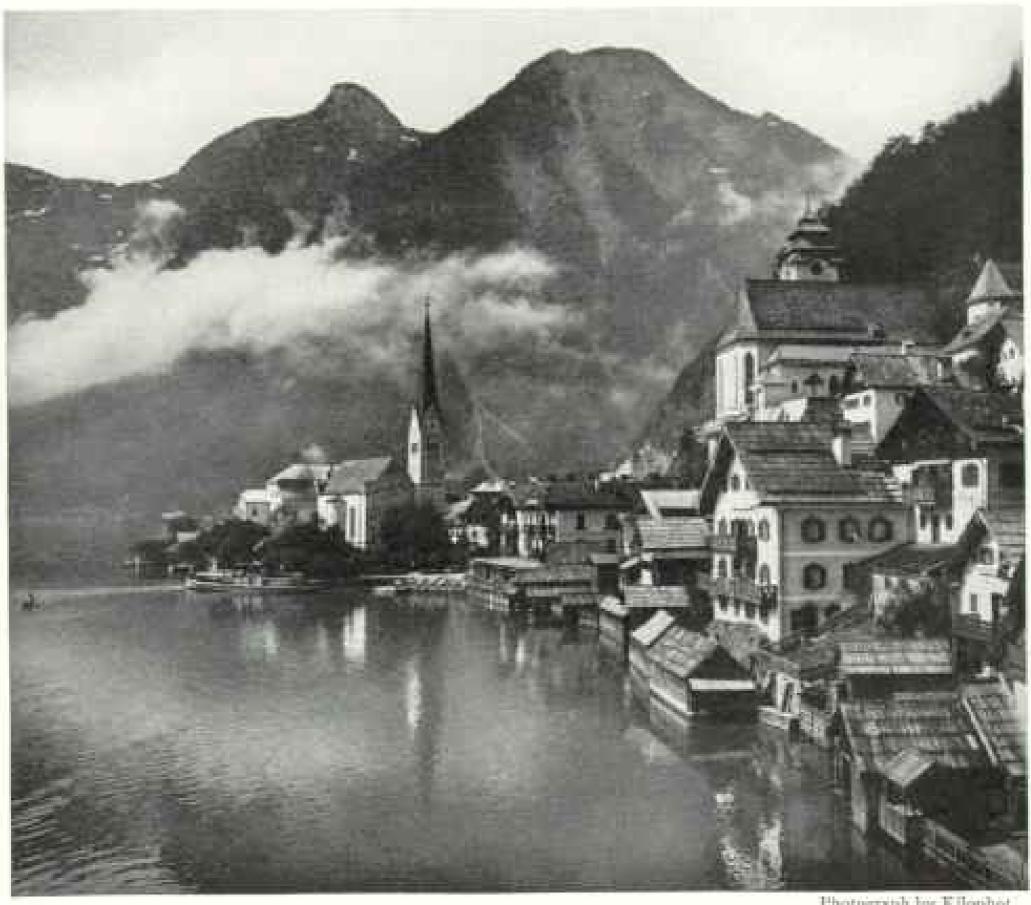
Just walking in the country is entrancing. Motor vehicles are few. The roads are hard. You see and hear birds you never saw before.

Everybody has a garden—the post office, the public library, the railway station, the doctor, the priest, and all the little inns. Flowers grow late here, because of the even climate and the generous rains. Those which you see in greatest profusion are Madonna lilies, phlox, pinks, roses, snapdragons, and sweet-Williams.

Two days without rain is considered a drought, and, with a great show of importance, the town elders bring out the fire hose and drench everything in sight. I often used to go to the post office in a hurry with a letter for overseas to find the whole force out training roses over trellises.

But the post office had other surprises. One day I came upon a young American sitting gloomily outside the telephone booth. (The only available telephone was in the post office.)

"Can you imagine," she said, "I've been



Photograph by Kliophot

SQUEEZED BETWEEN LAKE AND MOUNTAIN, HALLSTATT MAY GROW SKYWARD ONLY!

A waterfall splashes through the center of this fairyland village, where ground space is at a premium. To get to the railway station, travelers must ferry across the Hallstatter Sec. The steamer is about to pull out from its pier, so the boatman stands up to row his little craft hurriedly away. On summer evenings, band concerts are held on the lake boats.

sitting here just three hours trying to reach a friend at a hotel in Brussels. But the German-speaking operator at Salzburg can't understand the French-speaking operator at Brussels, and so we aren't getting anywhere."

"Try telegraphing," I suggested. "Have your friend call you here at two and stay around the booth." It worked.

LOST: THE CITY OF PHILADELPHIA

Once I went to the post office to send a cablegram to Philadelphia. After much thumbing of a large official directory, a clerk announced with delightful frankness: "Very sorry, but we are unable to locate any such place."

"It simply has to be there," I answered. "That's where I live."

Greater efforts and then, with a note of triumph, "Here it is! Philadelphia, Tennessee.

I shall never forget the day some friends of mine from home drove up to the Castle in their Ford station car. Such a thing had never been seen before.

"Is it a saving wagon?" the onlookers cried, meaning, of course, an ambulance. Everybody must get in it, on top of it, and be photographed standing beside it.

The naivete of the Salzkammergut is well matched by its humor. The gaiety of its people is spontaneous and their fun is kind. They may be poor, but they can always smile.

Whenever the Castle steward, whose business it was to heat my bath, would meet me on the street, he was just as likely to



Photograph by Burner Helmes from Galleway

SUNSET CASTS A HALO AROUND THIS CROSS IN MEMORY OF A MOND SEE TRACEDY

Country folk told the author how a bride and groom, with their parents, were rowing in a small boat on the lake. A heavy granite bowlder tumbled down from the abrupt face of the Schaf Berg and crushed the entire party (page 465). The rock stands in the water where it fell a hundred years ago, and to this day people lay flowers beside the crosses.

greet me with a cheery "Heisses Wasser" (hot water) as with "Guten Tag." And a personal maid at the Castle whom I once rebuked for not changing the linen oftener, would sometimes call out as she passed me, "Frisches Handtuch" (fresh towel), without meaning in any way to be impertinent.

INNS HAVE AN HONOR SYSTEM

Another characteristic is honesty and trustfulness. When we went to dinner in the evening at any of the local inns, we would give our entire order verbally to a waitress.

She made no memorandum, and later, sometimes hours later, the head-waitress would come around with the inevitable leather bag on her hip. The table had been entirely cleared, and she had only our word for what we had eaten—and we had to remember whether we had snatched one or two Vienna rolls from a passing tray and how much red or white wine we had drunk, if any. She had no other way of knowing.

I have often bicycled up to a roadside inn and found, lying about on the tables, a considerable amount of money left by the customers who preceded me. The innkeeper was not even within earshot. The nearest thing to this that I can think of in our country is the man at the newsstand who seems to have a great deal of confidence in his passing patrons.

Simple, gay, trusting, warmhearted people, these Austrians, who wear their scars with so brave a smile.



BOUND DOWN THE GRAND CANAL, THE AUTHOR'S "YACHT" IS ABOUT TO SHOVE OFF

Curious peddlers and bicyclists stop to watch as Mrs. Price steps aboard the 25-foot fishing craft at Tungchow, China. Professor James A. Hunter, an American mission scientist, accompanied the Prices last summer on their voyage southward along the historic waterway. The vessel's captain, Green Mountain King, stows his passengers' duffel under the straw bood of the "suite de luxe."



A JOLLY HOUSEWIFE MOVES HER KITCHEN OUTDOORS IN FINE WEATHER

The portable clay stoves burn straw, since wood is scarce on the deforested Hopeh plain. With the fan in her hand, the mother blows the fire to produce a brief but hot blaze, quickly cooking the rice or millet in the thin iron pan.

GRAND CANAL PANORAMA

By WILLARD PRICE

With Illustrations from Photographs by the Author

I THOUGHT everyone knew about the Grand Canal. In my earliest geography lesson on Asia an imaginative teacher pictured China as a vast yellow land crossed by the Grand Canal and girded by the Great Wall. Thenceforth the mention of China always brought up the vision of majestic junks sailing along a magnificent waterway in the shadow of a mighty wall.

Then to be told in a Peiping travel agency that they could give me no information about the Grand Canal, that they never had an inquiry about it, that no one ever went there, roused in me a feeling of personal resentment. It was as if one of my own most precious treasures were scorned.

Friends in Peiping had heard of cruises on the southern part of the Grand Canal between Soochow and Hangchow. But all the great northern stretch of the Canal was, so far as sight-seers were concerned, unvisited and unknown (map, page 488).

THE REAL HEART OF CHINA

And what a sight they were missing! The railroad and motor road are like pneumatic tubes that shoot passengers through North China, often over monotonous stretches, seldom giving even a distant glimpse of one of the greatest achievements of the ancient world.

One might suppose that the Grand Canal no longer existed—or at least that it was no longer used.

Yet, after actually penetrating to it, one has a curious feeling that here is the real heart of China. Moderns may go by train or motor. But 4,000-year-old China still swarms along the ancient waterway.

These river dwellers bump cargo boats, shout "Lend me your light" (Make way to pass), live down in the hold with a dozen children and the memorial tablets of ancestors, take down the great sail and mast to slip under ancient bridges, and cook millet on the afterdeck (page 508).

They make regular visits to the prow to burn incense before the "Goddess-everlistening-to-the-prayers-of-mortals-whopass-over-water," and toss a sack of grain to the bandits who, if they were not given a little, would take all. Hearing that the head of navigation of the Grand Canal was at Tungchow, a town twelve miles east of Peiping, I took my wife, blankets, food, and a Flit gun and sallied thence. There we found Professor James A. Hunter, scientist connected with an American mission. He agreed to find a boat for us and to leave his researches in animal husbandry and voyage with us.

ON BEING POLITE TO BANDITS

On the morning of departure we rose at dawn. At the breakfast table one of the ladies of the mission admonished Mr. Hunter:

"Now, James, if you meet bandits, don't get angry with them. You did last time. You lost your temper! They might have shot you."

"But they didn't," Hunter reminded her.
"I know. But that's no way to handle bandits. They're not used to being treated that way. You must be polite—and patient."

Hunter gave her his sweetest smile.

We rickshaed through the waking streets of Tungchow. Although this town lies in a back eddy aside from the main line of travel, it is one of the most significant points in China.

Japanese troops marched, singing, through the great South Gate of the old city wall. They were bound for Peiping to receive a flag conferred by the Emperor. We passed the barracks, extensive buildings made into a fort by a high serrated wall. A pink building, the former Girls' Normal School, was military headquarters. The girls had been transferred to temporary quarters and mollified with free tuition and board.

Wherever the Japanese go they plant trees; a mud flat was becoming a park and new roads were shaded. There had recently been staged a Clean-up Day—like the semi-annual event in Japan when the contents of all houses are supposed to be taken out, beaten, and aired—but Clean-up Day had not been much of a success in Tungchow. It was looked upon with suspicion.

Some protested that there had never been such a thing—so why should it begin now? Others argued that a good Chinese house-



Drawn by Newman Bunstend

LONGEST MAN-MADE WATERWAY, CHINA'S GRAND CANAL STRETCHES 1,000 MILES SOUTHWARD FROM PEIPING

Begun nearly 2,500 years ago, the giant ditch winds via Tungchow, where the author embarked, to Tientsin; thence across the Yellow and Yangtze Rivers to Hangchow. Marco Polo was appointed by Kublai Khan to the governorship of the important city of Yangchow about A. D. 1782. He described the canal as "a wide and deep channel dug between stream and stream, between lake and lake, forming as it were a great river on which large vessels can ply."

wife cleans up every day and that to clean up only once in six months is disgraceful.

BUILDING BOOM IN TUNGCHOW

Factories, banks, were under construction. The building boom of near-by Manchuria has reached Tungchow. We passed the rising towers of a 1,000-watt wireless station. Motor trucks loaded with building materials and military supplies shook the ancient streets.

A beautiful old Confucian temple had been repaired to accommodate the offices of the Government. There Chinese officials and Japanese advisers work side by side. Above it towered the venerable Tungchow Pagoda, 13 stories high. Small bells fringing every tier sent music down the wind,

As we looked, a snow-white pigeon with a large black whistle on its back circled the pagoda, leaving a trail of throbbing sound. The whole tower, except for a room containing a Buddha, is said to be solid; and a proud citizen who stopped to enjoy our admiration of it informed us earnestly that foreign cannon could never harm it.

We paused again to buy coolie hats. Centuries of Chinese experience had de-



BUYER: "THIRTY CENTS? MAKE IT 20." SELLER: "PAY 25 AND THE SHOVEL'S YOURS!"

"Bargaining is as necessary to trade as poling to a vessel," says a Chinese proverb. These villagers at a temple fair squat on their haunches in perfect comfort, enjoying the pleasant, leisurely dispute over prices. Dr. Y. C. James Yen's educational movement has introduced improved farming implements along with its mass education program (page 498).

signed them to keep out glare and heat. Plain ones of straw only, with ribbons to tie under the chin or behind the head, may be had for three cents (U.S.).

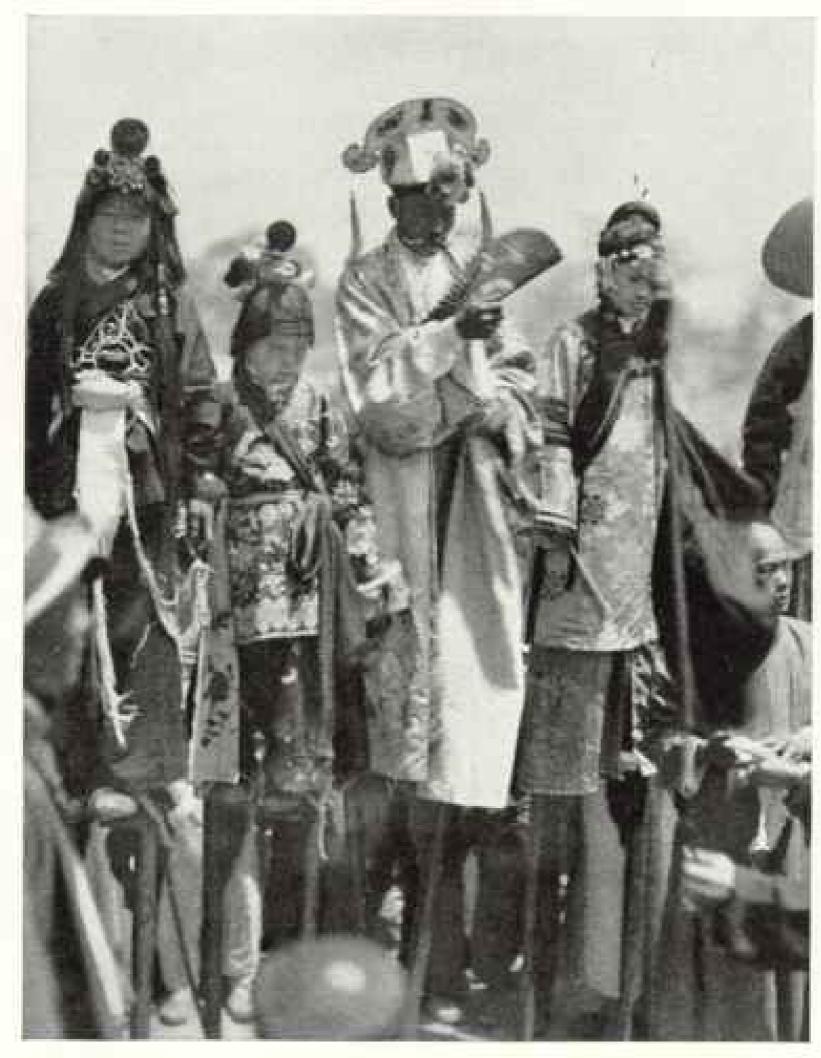
We purchased the finest the store afforded, seven-cent hats, cloth-lined for coolness (p. 493). The ribbons were patterned in blue and had a coquettish flare when tied in a bowknot beneath a masculine chin.

Through the musty darkness of the East Gate we went, past the bayonets of the constabulary who guard the city by day and close the great iron-studded doors firmly against all comers by night; and arrived soon at the water's edge. Here was the beginning of romance. Here was the northern terminus of what was, next to the Yangtze River, the chief highway of the Celestial Empire. Approximately 1,000 miles long, it connected two civilizations, that of the big rawboned millet eaters of North China with that of the sleek, neat rice eaters of South China.

ALONG THE "MOVE-GOODS RIVER"

Above this point barges could not go, although the river itself, the Pei, has its rise in the hills north of Peiping.

Some contend that, since this section of the great waterway is a river, it should not



DANCING REACHES NEW HEIGHTS AT A TEMPLE FAIR NEAR THE GRAND CANAL

Spectators were more intrigued by the party of Americans than by these stilt dancers in gaudy antique costumes.

be considered as part of the Grand Canal, which is therefore said to have its northern end at Tientsin. The matter seems hardly worth arguing except that it may be pointed out that much of the Grand Canal south of Tientsin also consists of rivers. In so far as was possible, the Grand Canal was sensibly routed to follow the beds of existing rivers and lakes. There are few places where there is not a considerable current.

The Chinese name for the Grand Canal is Yun Ho ("ho" meaning river). Our Chinese boatmen referred to the whole colloquially as the "Move-Goods River." Our own term, Grand Canal, is of course un-

known to the Chinese. The practical fact is that the entire stretch from Hangchow is used as one thorough-fare.

Its most honored use in prerailway times was the transportation of tribute from the southern provinces to the Imperial Court at Peking (Peiping). This tribate consisted mostly of bags of rice. They were unloaded here at Tungchow and laid out on the shore to dry, musty from long confinement in damp holds.

The trip decidedly affected the flavor of the rice. People got used to it. A taste for musty rice grew up among the epicures of North China, so that finally they could tolerate none that was fresh, a fact reminding us

of the city boy who spent a day in the country and complained that the eggs had no taste.

A BARGE ON THE CHINESE NILE

Even today there are rice dealers in Tungchow who, by a special process, make their rice musty to satisfy this demand.

From a tangle of boats a tall, browned Chinese with an open face (so many Chinese faces are shut) and a pleasant smile came to greet us.

"This is our captain," said Hunter. "His name is Wang Yu Shan. It means Green Mountain King" (pages 499 and 514).

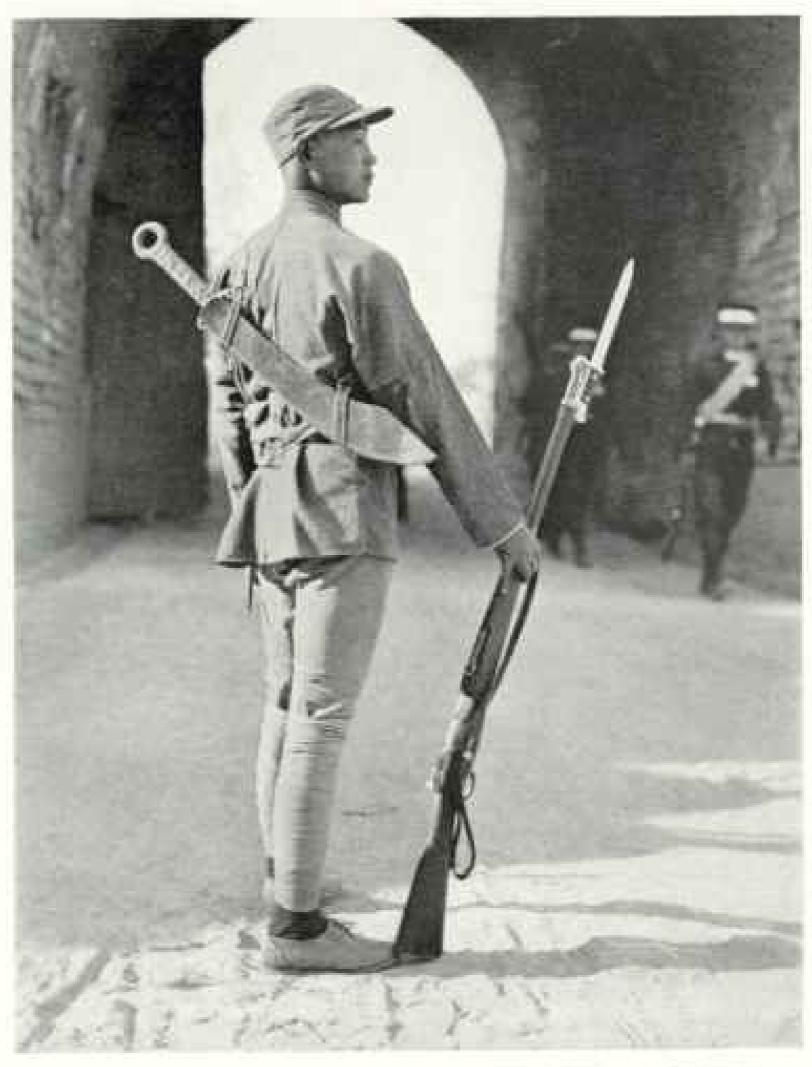
Green Mountain King grinned and led us to our boat (page 486). If we had been expecting a Cleopatra's barge, we should have been partially disappointed. This was a barge, but Cleopatra might have disowned it. There is no reason for passenger boats where there are no passengers. This plain craft was not sufficiently skilled in the arts of deceit to conceal the fact that it was just an honest hishing boat on a vacation.

The Chinese called it a "net boat" and Green Mountain King was a net fisherman of no small skill, as we were to find out. The bout was 25 feet long, 7 wide, blunt at both ends, flat-bottomed, equipped with a coal-ball stove forward for cooking. The crew slept in a covered hold aft

along with other forms of life which neither rested nor slept.

The suite de luxe was amidships. It consisted of an 8-foot stretch of floor board canopied by straw matting on a bamboo frame. This formed a sort of cave. The roof was so low that one could not stand without making a deep and continuous Oriental bow, doubtless good discipline for Westerners, who respond so clumsily to the courtesies of the East.

We stowed our duffel, spread camp blankets on the floor, and reclined in regal indolence for our trip down the Chinese Nile.



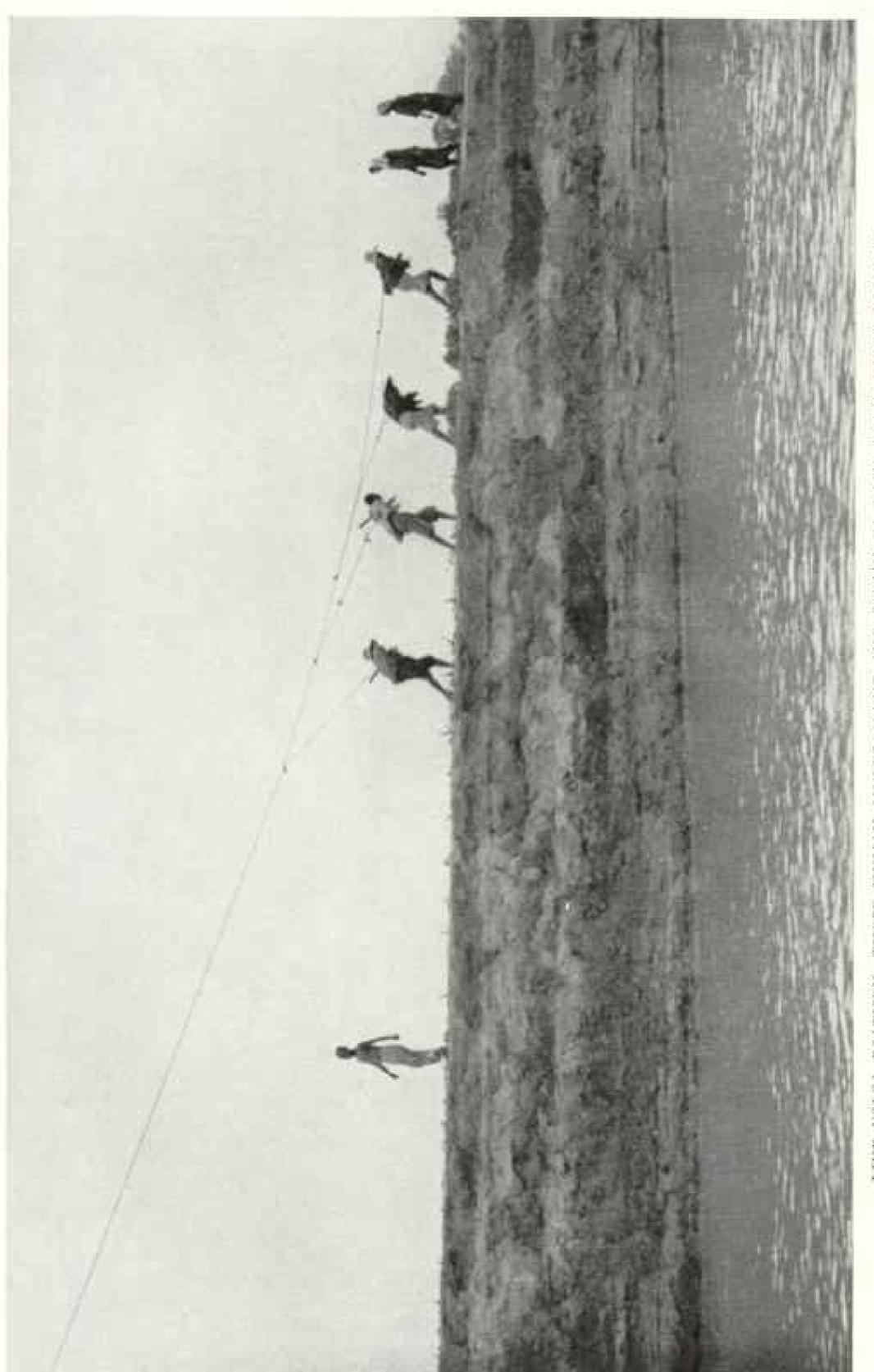
FOR HAND-TO-HAND FIGHTING HE PREFERS HIS BIG CHOPPER TO THE STUBBY BAYONET

Light cotton suits, puttees, and low shoes are the usual military uniform of Chinese soldiers. Nattier dress marks two policemen approaching through Tungchow's city gate.

> Like the Nile, it flowed brown and swift, and our boat was no sooner free of its moorings than it tore downstream with the bit in its teeth. Our speed was increased by the poles of the crew (pages 497 and 503).

POLE POWER AIDS CURRENT

On each side of the boat was a narrow deck, or runway, extending from bow to stern. Along each of these ran a stout lad with the haft of his 15-foot pole braced against his shoulder and the push-pull end, consisting of metal point and book, planted in the mud bottom. Upon reaching the



PORWARD CRAFT LIKE VOLGA BOATMEN, THUSE HUMAN MULES GRUNT AND STRAIN TO INCH THEIR

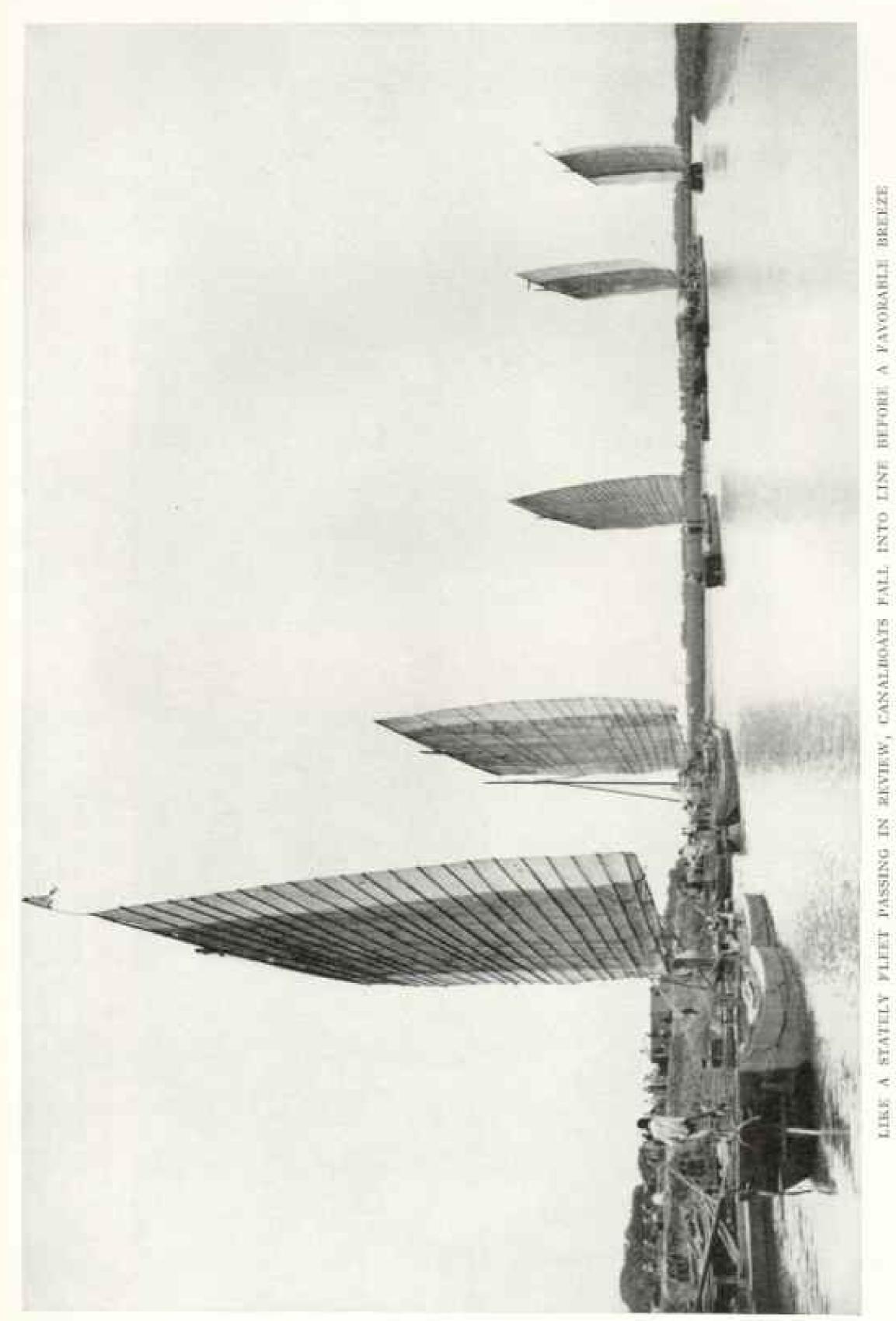
Each bouves in a harness attached to the towrope. The long cable lends aloft to the masthead so it will clear vessels moored along the bank and will not drag in the Water. The mast's flexibility helps to case the pull on the four-manpower team. Country folk use the towpath as a thoroughlare along the Grand, called "Move-Goods River" by the author's boutment. The high banks are a mile apart in some places, and summer rains may flood the waterway to its full within.



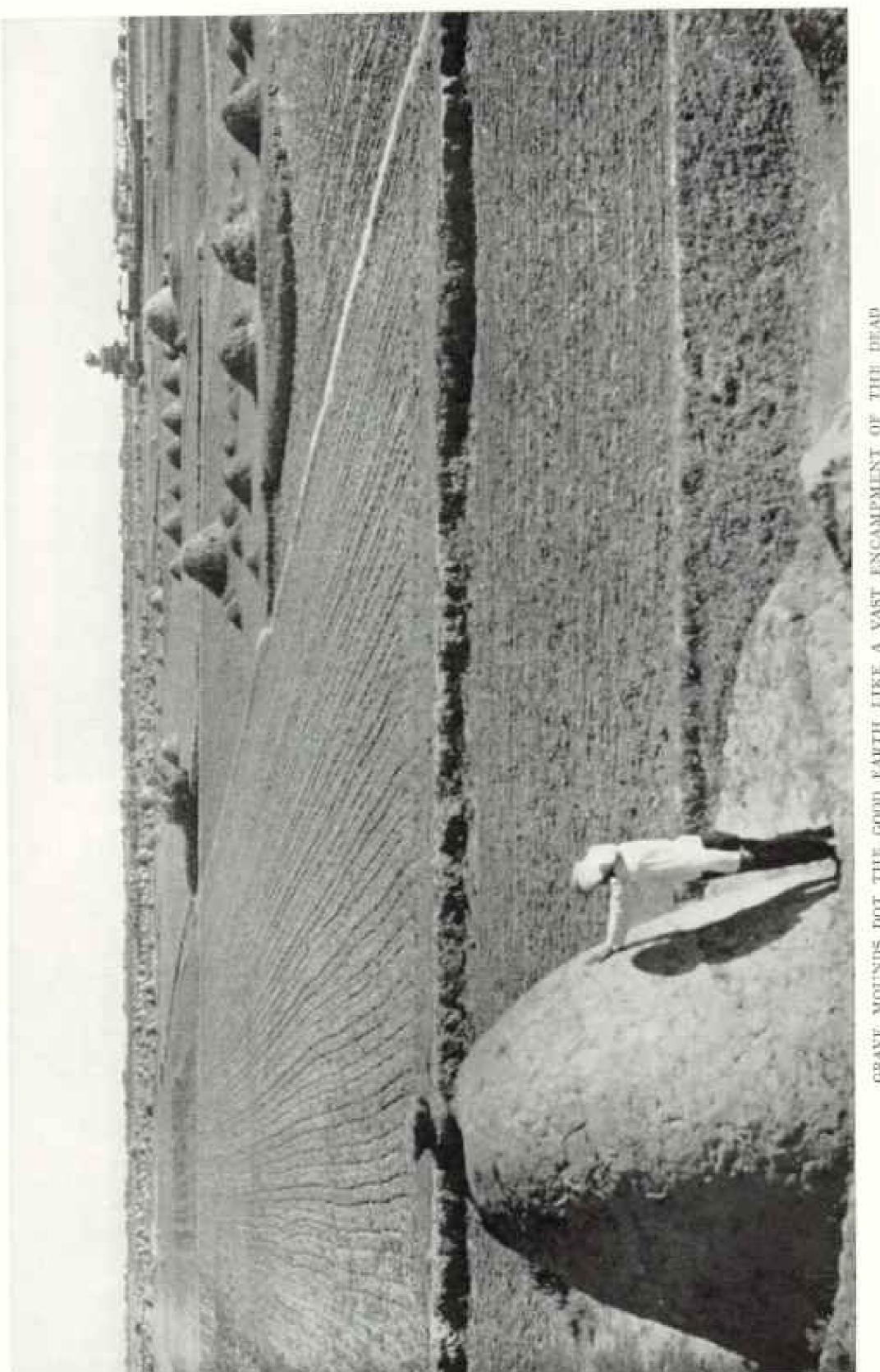
ES THEM WHEN THE FAMILY NEEDS SHOES, MOTHER MAK

To give bulk to the sole of the slipper, she stitches sheets of the Los Angeles Times between two thin layers of cloth! Old American newspapers are imported for this purpose. No bound feet are seen here, but in other places the suthor noticed many women and girls mincing about on they "golden lilles" (page 511).

Mrs. Pelce has barely room enough to wash the potatoes for dinner. "Have you exten?" is the customary grocting when boat crews pass, and the roply to this Chinese version of "How goes it?" is "We have eaten?" The comfortable coolle hats, finest to be had in Tungchow, cost the author seven cents spiece.



A tuttured pennant flutters atop the nearest vessel, where four-pronged anchors hang at the stem and the helmsman steers with a tiller. Wooden battens stiffen the sails. In a sails out of the wind as soon as the halyard is let go.



THE DEAD IL GOOD EARTH LIKE A VAST ENCAMPMENT OF GRAVE MOUNDS DOT TH

Living farmers are far outnumbered by their ancestors in these fields near Tsinghal, south of Tientsin. Newcomers to China, seeing such motinals from a distance, of the mistake them for haycocks. In a family group (upper right) the father's grave rises above these of his wife and children. Rurial grounds occupy valuable acres and interfere with cultivation; they also handicap builders of reads and railways. Chinese are leath to disturb the graves (page 512).



A YOUNG VILLAGE EDITOR CHALKS UP WORLD NEWS ON THE BLACKBOARD-AND EVEN COOLIES CAN READ IT!

People of Ting Hsien owe their literacy to Dr. Y. C. James Yen's mass education movement, which started with 1,450 students in 1922 and within seven years had taught five million to read and write (page 498). After a four-month course, costing 12 cents, graduates receive the "Literate Citizen" diploma—"much more picturesque than the sheepskin I received from Yale," says Dr. Yen.

stern he jerked his pole free (unless it jerked him overboard) and carried it back to the bow, then repeated the process.

The captain was perched on the prow watching for hidden trouble and shouted instructions to his small son at the rudder,

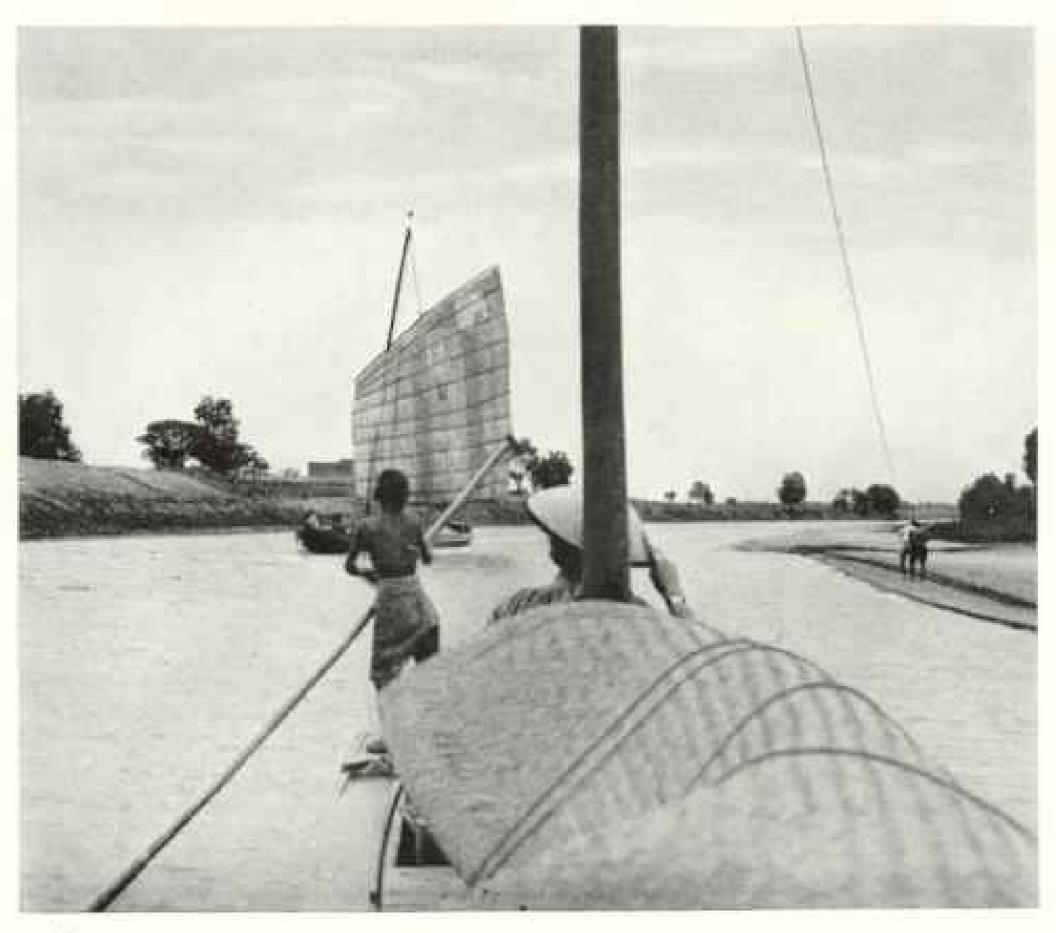
We darted to one side or the other of sand bars. Even the sixth sense of a boatman could not always penetrate the rich water which, by the way, was not at all disagreeable in color, but looked exactly like delicious cocoa requiring only that you add sugar and serve—and we would come up with a sickening throw upon a concealed mud bank.

Then there would be a sort of college yell from the entire crew and a mighty straining and heaving against the strong current to get the boat free. Some mud flats were ingeniously negotiated by whirling the boat like a merry-goround, screwing ourselves downstream.

Frequently we shot down a boiling, swirling stretch of rapids. There the crew gave themselves up to unrestrained shouting and prancing, quite disproving all statements about the unemotional character of the Chinese.

Our captain was like a small boy—a most engaging personality. He was in high spirits. He enjoyed giving orders. Was be not for the first time responsible for passengers, just like the captain of an ocean liner?

His enthusiasm was dampened when he lost his footing while trying to hold the boat with his pole against the spiral course of a violent whirlpool. Over he went and came



"A THOUSAND STROKES WITH THE OAR AND TEN THOUSAND PUSHES WITH THE POLE ARE NOT EQUAL TO A RAGGED SAIL"

The truth of this proverb is evident here to Captain Green Mountain King. With the wind against him, he has ordered his son to pole and two men on the towpath to pull on the line leading to the masthead. An approaching vessel glides serenely along under its patched sail. A canalboat's mast may be unshipped and lowered when passing beneath a bridge.

up with a comically tragic countenance. He, the commander, had lost face and there was not a word from him for the next hour.

My boyhood notions concerning the Grand Canal were rapidly being modified. Here was no straight artificial trench with high banks. As in many parts of its vast length, the canal here followed the river windings and coiled dragonlike over the plain. True, there were high banks, but they were a mile apart, and summer rains would swell the stream until it became a hurrying flood a mile wide.

But now peasants were harvesting wheat on the flood plain beside the canal, which as yet confined itself to a channel only one or two hundred feet wide. The farmers worked against time to complete their task before the July downpour. Meanwhile the ragged poor squatted in groups, waiting to glean. After the harvest they would go over the field to pick up stray heads. Neither farmers nor gleaners would get much. There had been no rain for weeks and the crop was poor.

WHO OWNS THE BOTTOM OF A SHIFT-ING CANAL?

I had thought of the canal as stable and fixed; but it is fickle.

"Last year the channel was there," said Green Mountain King, pointing to a cut in the plain a half mile away.

An interesting question came to our minds. Who owns the bottom of the Grand Canal?

Last year some farmer raised wheat or corn on the very ground over which our



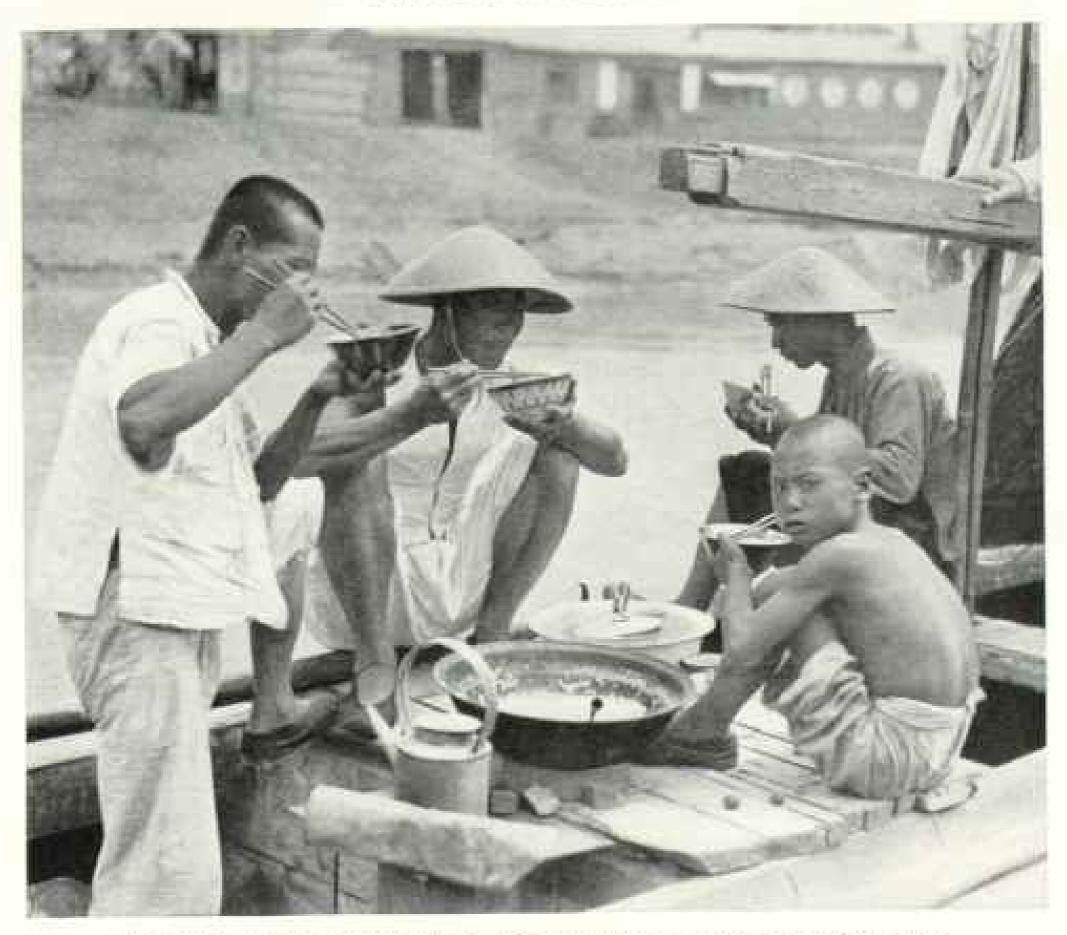
A SCHOOLMA'AM, AGED 12, TEACHES HER PLAYMATES THE THREE R'S

The carnest bob-haired miss of Ting Hsien is one of thousands of volunteer teachers in Dr. Yen's amazing mass education project (page 496). Working under an adult who supervises about 300 pupils, she has probably just learned the lesson which she now passes on to her small class. Historites of all ages are taught 1,300 of the most useful Chinese characters.



CROSSED STRINGS SERVE AS TWEEZERS TO JERK HAIR FROM A YOUNG BRIDE'S HEAD

After marriage, a Chinese girl should wear her hair squared across the brow. A band of cloth marks the fashionable line, below which all locks must go, "Her friend holds the cord stretched between her teeth and her two hands and draws it in such a way that the small hairs are caught between two crossed strands and plucked out" (page 507).



"NIMBLE LADS" (CHOPSTICKS) ARE THE ONLY DINING TOOLS AT THE CAPTAIN'S TABLE

Squatting on the rail, a precarious perch for anyone but a Chinese boatman, Captain Green Mountain King enjoys a bowl of steaming rice with the crew. He invited his passengers to partake. "It was only the usual polite form," writes Mr. Price, "but we were ashamed that we had said nothing of the kind when we had enjoyed an abundant lunch three hours carlier" (page 503). In front of the Captain's young son is the little galley; a kettle of water for tea simmers on the coal stove.

boat was now gliding. This year he had lost a good part of his small farm, perhaps all of it. He would be supported by the community until next year when the bad luck might turn to some neighbor—was already turning, as a matter of fact, if we might judge by the way the current was biting into the land at sharp bends and good grain, undermined, was tumbling into the water.

Where the stream cut against one or the other of the high dikes which flanked the flood plain, the villagers had strewn the bank with bricks for the current to gnash its teeth upon and had planted trees to hold the soil together.

It was then necessary to delegate police to protect the trees. For in this desperately fuelless land unguarded trees disappear overnight and are next seen as smoke oozing out through the cracks and cicada-holes of kitchen walls.

Charming scenes unfolded ahead of us. Stretches of golden wheat or jade-green corn. Great sails moving as if through the grain. The glint of dragonilies, the flight of larks, crows, and haughty hoopoes. The rich brown water, brown earth, and brown mud houses against a cornflower sky. Beautiful old pagodas. Old temple roofs shaded by sacred trees, ancient and gnarled. A deep quiet over all, as of old age with folded hands.

Every country is older than its cities. And so is this country more ancient than one of the world's most ancient of living



ONLY CHOSTS MAY CALLOP ON THIS STONE HORSE

For their convenience, the saddled mount stands near the graves of a family named Chang, one of whose members was an official under the Ming dynasty. Emperor Wan Li presented the dead man's spirit with sculptured sheep to eat, attentive stone servants, guardian lions, and an assortment of carved dogs, cats, and tortoises to play with during the hereafter. A dike of the Grand Canal rises in the background.

cities which you could see from the top of yonder Tungchow Pagoda.

Peiping's * walls, gates, columns, temples, pai-lous, and palaces are old; yet they are young compared with this land of farm and village through which we sail. Here life moved along probably much as it does today before cities existed.

When Britons were painting themselves blue, a wooden plow already had been invented and was furrowing these fields. Women were spinning silk. A calendar, weights and measures, bronze dishes and ornaments were in use. Most remarkable of all, a way of writing and reading had been devised. And Chinese gentlemen were reciting lyric poetry a thousand years before the Golden Age of Greece.

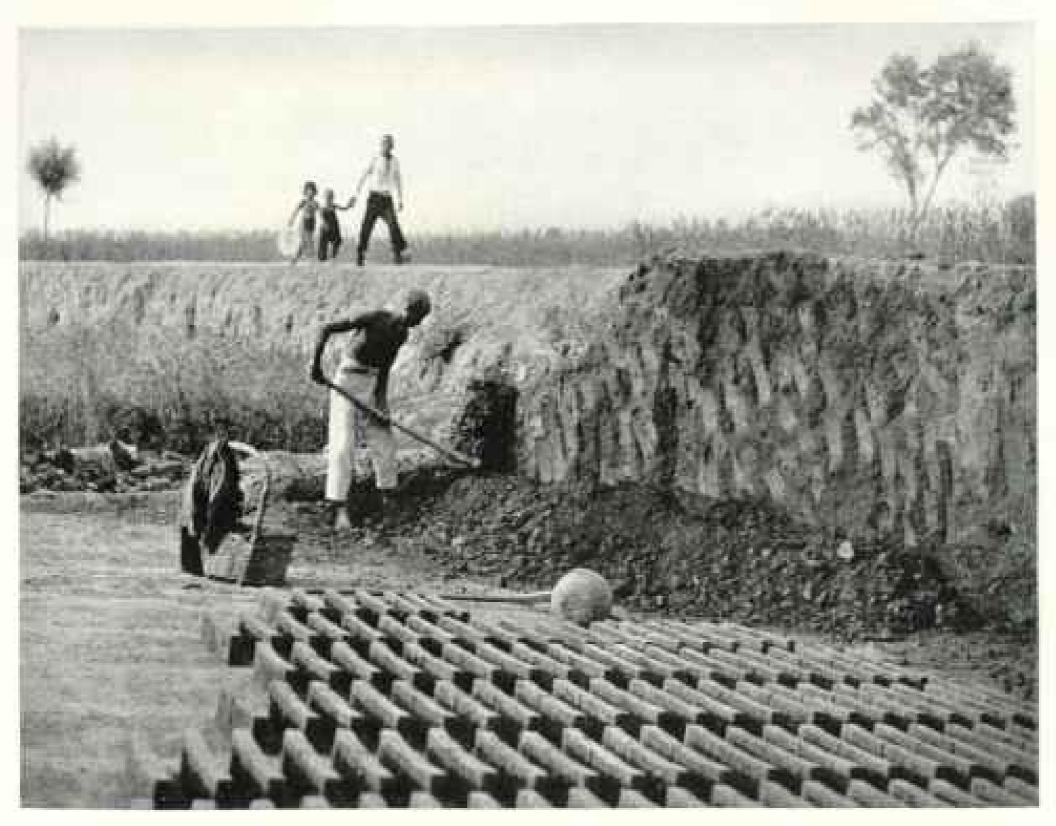
*See "The Glory That Was Imperial Peking," by W. Robert Moore, National Geographic Magazine, June, 1933; "Approach to Peiping," by John W. Thomason, Jr., February, 1936, and "Peiping's Happy New Year," by George Kin Leung, December, 1936. That seems long ago. But it is only yesterday in the life of this land.

When we try to think of men moving and working here ten thousand years ago, one hundred thousand, perhaps even a million years ago, our imagination breaks down and we can only rely upon the facts unearthed by the scientists. Fossils of the so-called "Peking Man" were found at the little village of Chou Kou Tien in 1929.

FIRECRACKERS AND BUGLES HERALD A RAIN PROCESSION

The age-old hush of the countryside was shattered by the blare of bugles and the thrum of drums. From a village on the dike came a strange procession. It was a crowd of villagers led by a boys' bugle corps. Red and blue banners waved.

What sounded like machine-gun fire at a distance proved to be the crackling of strings of firecrackers dangling from the ends of long poles.



BRICK FOR THE HOMES OF CHINA

Hoeing out clay, the elderly workman seems about to undermine the road, along which the little girl with a huge fan walks beside her father and brother. Mixed with chaff and short straw, the clay in the molds is dried in the sun. Fuel is so scarce near Paoting that comparatively few bricks are baked in kilns, and these are used mainly for foundations, where ground moisture would soften the sundried kind.

Hunter.

"How about photographing it?"

"Bad joss. They wouldn't let you."

"Let's land anyhow."

We leaped ashore and ran to intercept the parade before it should reach the canal. Coming near, we saw what looked like a kitchen table being borne in great state on the shoulders of four particularly solemn village elders. Upon the table was a board and upon the board a savage, scaly dragon three feet long.

"What's the idea?" I called to Hunter who ran beside me.

"To bring rain. The dragon is supposed to be the evil spirit that has kept rain away. They Il drown it in the canal, then rain can come."

The procession halted beside the canal. The table was set down. There was a sharp command. Men dropped to their knees about the bated dragon, kowtowed until

"A rain procession, I do believe," said their foreheads touched the ground, and begged the evil spirit not to be angry with them for what they must do to it.

> MUSICIANS FOR ANCIENT RITE WERE BOYS OF 4-H CLUBS

There were no priests. The leader in this ancient superstitious rite was, oddly enough, the only "modern" in the crowd, the young schoolteacher, and the musicians were the boys of the 4-H Clubs! Thus do old and new merge in China. We asked the teacher for permission to make photographs. He consented, rather gloomily.

"I don't mind," he said, "But it's the farmers. If it doesn't rain, they'll blame you. You may be followed, and hurt. You see, it's a matter of life and death with them. So I wouldn't if I were you—unless you're sure it will rain."

Hunter looked at the sky.

"I think it's going to rain," he said, and we took photographs.



DROWNING THE DRAGON WILL BRING RAIN-UNLESS THE CAMERA IS "BAD JOSS"

As the clay monster was slipped into the canal, it sank amid the farmers' nervous shouts of joy. This was a matter of life and death to them. Mr. Price was told that if no rain came they would blame it on him for photographing the ceremony. A cloudless sky made the travelers fear pursuit that night. But, at dawn, rain fell!



"FORGIVE US. O EVIL SPIRIT: WE MUST DROWN YOU SO THE RAIN MAY COME"

Believing a wicked dragon responsible for their long drought, these farmers made a ferocious monster of clay, with clamshells for scales. Bugies blared, firecrackers popped, and banners waved as the villagers bore the dragon on a table to the canal. Before "drowning" the culprit, they kowtow before it, burn incense, and beg it not to be angry with them for what they must do (page 501).



HER BUNBONNET, A COOLIE HAT; HER CLOTHESLINE, THE LOWERED MAST

The boat's hood of straw matting is temporarily dismantled, for rain came through it and soaked everything in the "cabin." The two sailors plant their poles in the mud bottom. To push the craft forward, each puts his shoulder against the T-shaped butt and walks along the narrow runway, as if on a treadmill, toward the stern. There he jerks the pole free—unless it sticks and pulls him overboard.

The dragon was cleverly made of clay. The realistic 'scales' were clamshells. The sculptor had shown no mean ability in designing the brutal head and the savage mouth bristling with ferocious teeth.

One could easily share the feeling of the villagers that when so horrible a monster had been extinguished the world would be a better place.

A DRAGON IS "DROWNED"

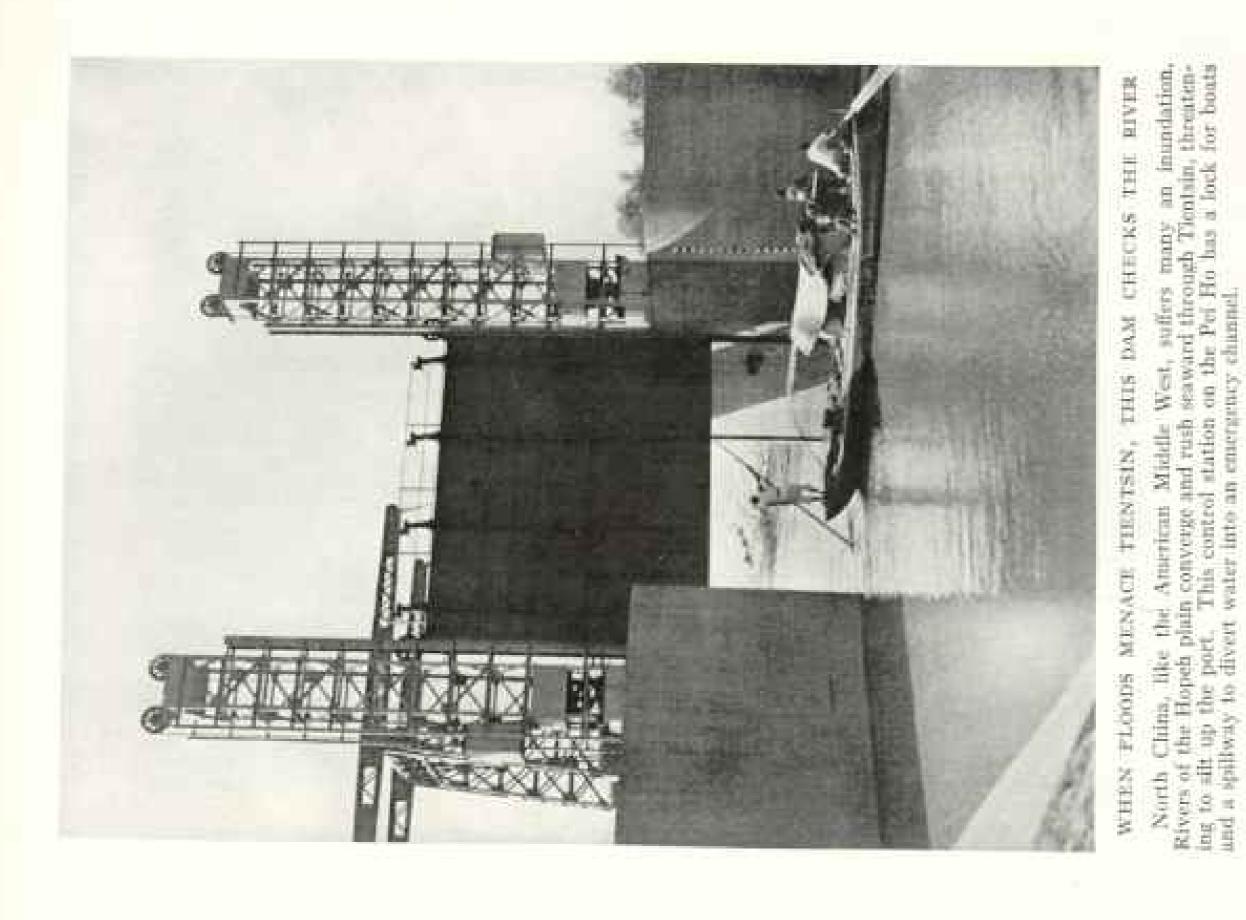
Another sharp command. The band burst into pandemonium, firecrackers set up a terrific din, and the dragon was borne to the water's edge and slipped from the board into the stream. It sank at once. There were nervous shouts of joy.

The procession re-formed and goosestepped away through the wet morning grass, the boys playing lustily, some of their elders glancing back now and then to the swirling current where their enemy had disappeared. The impression they left with the onlooker was one of pitiful, tragic earnestness. This meant so much to them. We sailed on; or rather, poled on. The wind was against us, but ships coming upstream were under full sail. The route was so tortuous that they could not rely upon sail alone, and half naked men with wooden yokes over their chests trudged along the towpath (page 492).

From the yokes extended lines which came together in a heavy towrope. This cable ran not to the deck of the boat but to the top of the mast. Thus the cable would ride clear of any intervening craft that might be moored alongshore; also its pull upon the yoke would be more easily borne by the men because of the flexibility of the mast.

"Have you eaten?" came the customary greeting from passing ships. And our men replied, "We have eaten," although they had not, and did not until three in the afternoon. Then they anchored and gathered about the coal-ball stove.

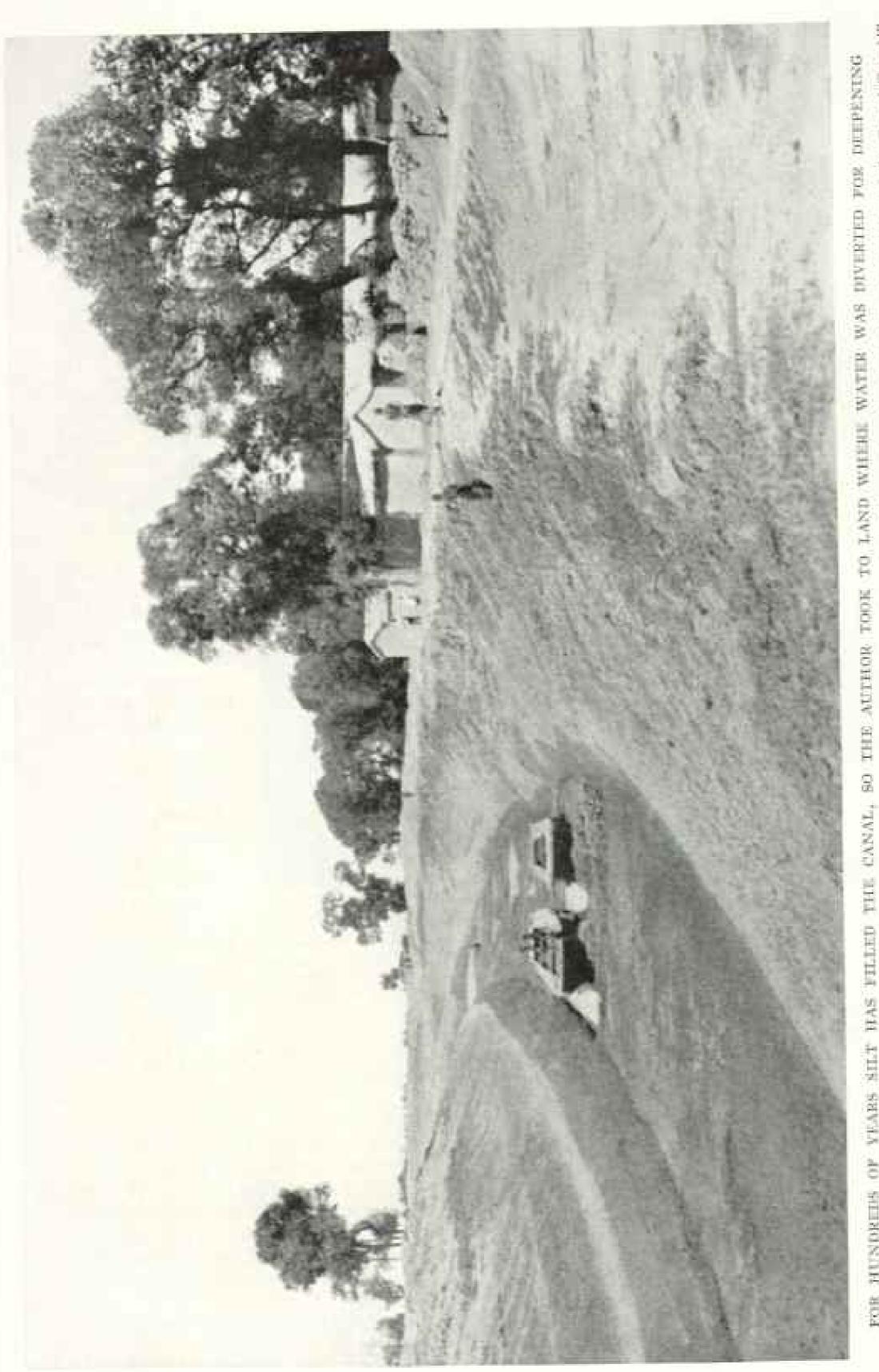
The "nimble lads" (chopsticks) were poised above the steaming rice bowls (page 499). But before they plunged in, Green





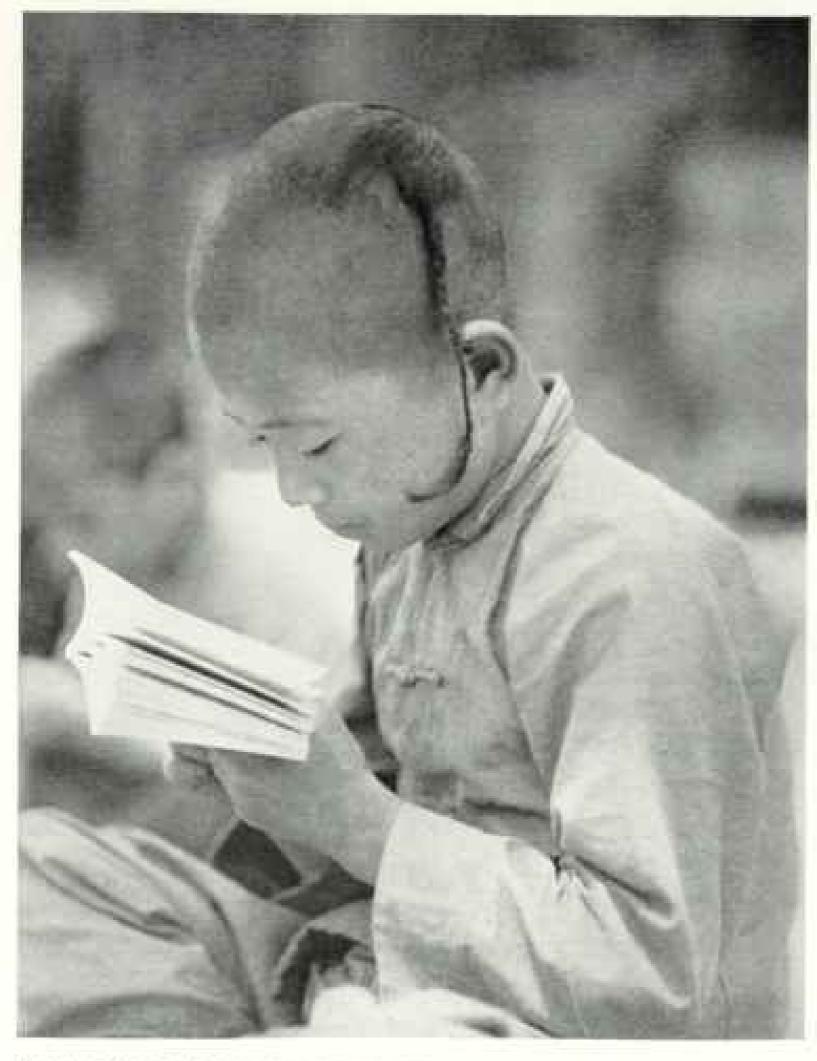
French capital erected the cement bridge over the Pei Ho, but citizens thought to ensure good fortune by adding the crested monster with big knobbed antennae, "It didn't work," sighed the local headman. Behind the boys on the scaly neck is part of Yangteen village.

504



"About six miles below Tientsin," he writes (page 513), "our voyage in the 'net boat" abruptly ended. We continued on foot along the bottom of the Grand Caral !!"

Twenty thousand men had been pressed into service to dig out the accumulated silt and carry it in baskets to the top of the dikes. On completed stretches of the dry played baseball. One farmer had dug a well in the canal bottom and was carrying up buckets of water to his fields. FOR HUNDREDS OF YEARS SILT HAS FILLED THE



A PRESENT-DAY STUDENT TAKES HIS QUEUE FROM OLD-TIME STYLES

The braided ornamental "tail" daugling from his shaved head is reminiscent of the queues imposed on the Chinese in the 17th century as a mark of submission to their Manchu conquerors. Eventually the people became proud of the odd coiffure, but most of them discarded it after the overthrow of the imperial dynasty in 1911.

Mountain King politely turned to us with "Won't you have something?" It was only the usual polite form, but we were ashamed that we had said nothing of the kind when we had enjoyed an abundant lunch three hours earlier.

ASHORE FOR A TEMPLE FAIR

A temple fair attracted us ashore and we were soon engulfed in a swirling crowd which found us even more interesting than the stilt dancers (page 490).

"We have seen only one foreigner in a whole year," an old lady explained apologetically. "He came with pills."

One man, his face twitching, followed us steadily for an hour. Then he asked:

"So you're not selling medicine?"

It was easy to guess the sort of "medicine" he had in mind. It is an unhappy fact that the only outsiders visiting many villages remote from road and railroad are the sellers of heroin.

Sunset found us on a rather forlorn stretch of the canal with no village in sight.

"Where do you sleep?" asked Green Mountain King.

There was hardly room in the boat for all. "One of us on board, two on shore," suggested Hunter. "Just roll up in our blankets."

Green Mountain King was worried.

"Too many

bandits," he objected. "Better go on to the next watchman."

WATCHMAN ARMED WITH A RATTLE

Dusk was deepening when we came to a small mud hut occupied by a lone watchman. This was a "loading station." Farmers might bring produce here to be placed on board the canalboats. But at present there were no boats and no farmers, only the frail little old watchman armed with a rattle.

"So—this is our staunch protector against a bandit foray," I commented.

"It's done with money, not with guns," Hunter explained. "This watchman represents all the farmers of this district. They make a bargain with the bandits to keep awny from this loading station. So we are quite safe here, except . . . "

He was studying the sky. The stars were shining brilliantly. There was not a cloud

the size of a man's hand.

I didn't need to ask what he was thinking. I had thought it all afternoon.

"But I think the teacher exaggerated," he said. "Not really much danger of our being followed. All the same, I wish it would rain."

Hunter slept in the boat; we two on our cots set up in a tiny shed, mud-made, roofed with cornstalks, and half filled with coal balls (page 508). We lay listening to gentle chewing sounds in the walls and roof, and clutched the Flit gun. The shed was open to the night on one side. It was easy to imagine rain fanatics crouching yonder among the standing corn.

Toward midnight Mary gasped, "The dragon!" She awoke with such a violent start that her cot collapsed, tossing her into the pile of coal balls. The watchman, alarmed, shook his tattle and stayed dis-

creetly indoors.

At dawn we awoke to the blessed sound of rain pattering on the cornstalks above our heads. We sailed away and fairly luxuriated in the life-giving drops that trickled down our necks as we huddled over the preparation of bacon, eggs, and coffee on the galley stove.

Toward noon the rain stopped. Tired of close quarters, we walked along the towpath and viewed the pageant of Chinese life.

Farmers lighted incense before a small brick "temple of the fields" in gratitude for the rain. High land that would not be reached by the flood was being sowed; a little procession moved across it, the first man plowing, the second dropping in the seed, the third sifting fertilizer into the furrow, the fourth closing the furrow and tamping it down by means of a scraper and roller.

A blindfolded ox and blindfolded donkey trudged about in a circle, drawing water from a well. A new well was being dug by an elaborate and lofty well-digging machine made of rickety bamboo.

It was odd to see a man with a sledge hammer breaking up his bed, as if in revenge for the sleepless nights it had given

him. The Chinese bed, or kang, is made of brick. Its hollow interior is heated by a fire. The chemical elements in the smoke combine with the mud and chaff of the bricks to make an excellent fertilizer (page 5131.

Therefore, when the family can afford a new bed, the old one is taken apart, carried to the field, set up again, and left there, a bed in the open, until fertilizer is needed. Then it is attacked with sledge hammers, and the resultant powder goes into the fur-DOWS.

The path skirted a village and we got intriguing glimpses of domestic life. Here it is not kept so closely hidden within walls as in the towns and cities.

A housewife was making slippers. To give bulk to the sole, she had inserted between the two thin layers of cloth a copy of the Los Angeles Times! Old American newspapers are specially imported into China for this purpose (page 493).

An old lady was deftly jerking hairs from the forehead of a young woman by means of a cleverly crisscrossed string. Upon marriage, a woman should wear her hair squared across her forehead, so all hairs below this line must go. Her friend holds the cord stretched between her teeth and her two hands and draws it in such a way that the small hairs are caught between two crossed strands and plucked out (page 498).

A BABY CHOOSES HIS VOCATION

An excited chattering led us into a courtyard where we saw a curious ceremony. On a small table was a basket containing an abacus, a hammer, a hoe, a Chinese dollar bill, an inkstone and a writing brush. Near by sat a child on his mother's lap (p. 510).

He was one year old-and it was time for him to choose his vocation. Whichever object he touched first would indicate his life work. If the abacus, he would be a merchant; the hammer, an artisan; the hoe, a farmer; the bill, a banker; the inkstone or writing brush, a scholar.

Two objects instead of one had been supplied to indicate scholarship because of the fervent hope of every Chinese family that

their son will be a scholar.

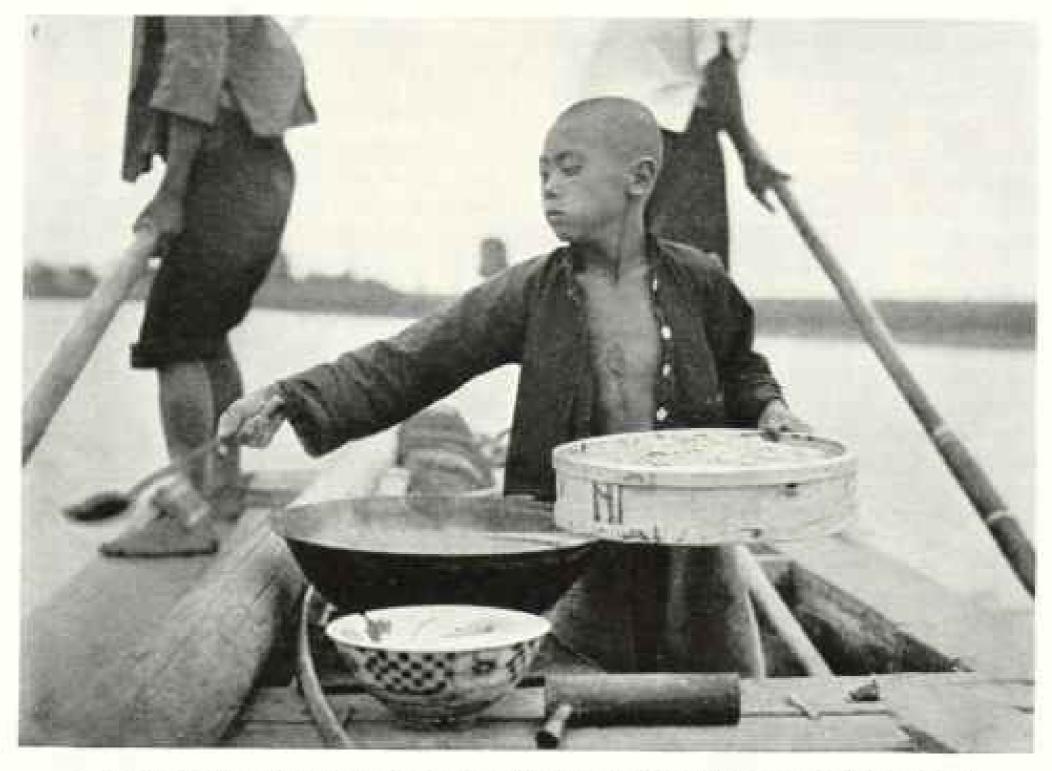
The baby gurgled, reached, firmly clutched the dollar bill. It was an omen of the passing of the ancient culture and the coming of modern commercialism and industrialism to China.

One man was cleaning a rifle, but hastily



READY FOR BANDITS OR INSECTS, THE PRICES CAMP IN A MUD HUT THEIR FIRST NIGHT OUT

Human marauders were kept away by a watchman at a near-by canal station. Sleeping on cots under the cornstalk roof of this shed, the author and his wife felt safe from everything except the rain makers whom they had photographed earlier in the day (pages 500, 503, and 507).



A FLY GOES OVER THE SIDE AS THE CAPTAIN'S SON BOILS RICH FOR DINNER

No strict believer in hygiene was this youthful ship's cook. To get drinking water, he reached over
the side with a round dipper and scooped up muddy brown water from the canal.

concealed it when he saw strangers coming.

The atmosphere of impending trouble hangs heavy over North China. Everywhere there are preparations for no one knows what -- certainly those who are preparing do not know. Particularly in the neighborhood of Paoting, where Japanese influence from the north meets Chinese authority from Nanking and Communist pressure from the west, the villagers are nervously getting ready for unknown events.

CO-OPERATIVE FORTI-FIGATION

It would be too great a task to fortify every village. Therefore the folk of a dozen or more villages co-operate to fortify one. Within its walls they will all take refuge in case of necessity.

We had cycled out over razor-backed paths from Paoting to such a village and had been amazed at the thickness and strength of the mud ramparts, the depth of the dry moat on the outer side of the wall, the belligerent aspect of the mud forts, one at each bend in the wall.

"It took all the men of 14 villages eight months to do it," a citizen told us.

How wars and rumors of wars drain the energy of China!



ONE SIDE OF THIS PAGODA FELL AWAY, REVEALING AN OLDER STRUCTURE INSIDE

Built more than a thousand years ago, the many-storied tower in the Ting Hsien district was named Liao Ti, or "Watch for Enemies." The slender inner building was laid bare only about 50 years ago. Pagodas are sometimes solid, but many have stairways leading to the top.



CHOOSING HIS LIFE WORK, A ONE-YEAR-OLD PICKS THE DOLLAR-HE'LL HE A BANKER!

According to old Chinese custom, the baby is held on his mother's lap near a basket containing various articles. The first thing he picks up indicates his future career. If he had chosen the abacus or counter, he would be a merchant; the hoc, a farmer; the hammer, an artisan; the inkstone or writing brush, a scholar. His parents supplied two articles indicating scholarship, hoping he would select this most honored profession. But the youngster "gurgled, reached, firmly clutched the dollar bill" (page 507).

Our boat sailed through a gorgeous canary-and-purple sunset into a flea-bitten settlement bearing the proud name of Great Wang Town (Ta Wang Chiang). It was chiefly the village of the Wang family. There are hundreds of villages in China inhabited by a single family. And so complicated are relationships, early and late intermarriages, and adoptions that the truth. The boy is father to the man," is here carried a step further and a lad may actually be grandfather to a patriarch of seventy!

Again, the problem of sleep. The ramshackle houses, howling curs, and piratical aspect of the inhabitants did not suggest a good night's rest on shore. The Wangs flocked to see us and streamed out upon the flat deck of a ferry barge moored to the bank. We drew up alongside the ferry.

For a few moments, gaping silence. It

was an evil-looking crowd. Some peered down into our boat, seeming to scan our possessions with covetous eyes.

"Trust we haven't dropped into a nest of canal pirates," remarked Hunter. "We'd better try to drum up a little friendship. Where's that magazine with the pictures in it?"

A GEOGRAPHIC WINS A FRIEND

I handed him a copy of The National Geographic Magazine. He clambered up upon the barge deck and opened it. Instantly he was mobbed. Everyone wanted to see at once. With a football rush, a brawny fellow pushed his way through to Hunter.

"I am the headman," he said. "Who are you?"

Hunter explained, and beguiled the big

fellow with pictures. The headman peered at the unfamiliar English type.

Hunter indicated me,

"He wrote this."

The headman inspected the type again with the air of an expert examining a sample of calligraphy.

"He writes very well," he said finally.

"It looks almost like print."

He pointed to a mud house half hidden behind compost heaps.

"That is my house. Come up and drink

white boiled water."

We went up, sat on the headman's brick bed, and drank white boiled water. In many poor Chinese villages tea is rare. The water is called "white" to distinguish it from tea.

BOUND FRET AND QUEUES SURVIVE

The villagers crowded into the room. Some of the old men still clung to their queues—although they could have made six cents per queue by selling them in the hair marts of Tientsin, whence they would be sent to America.

We noticed that not only every woman but every girl in the room stalked about on bound feet. The custom is happily disappearing in the cities, but not in the country. A country swain will not marry a girl with natural feet. They are considered huge, flat, and ugly.

"Stay the night," said the headman.

"Sleep here."

Since this was the only room of the house, it was evident that the entire family would sleep with us. And it was more than probable that half the village would stay to

watch us sleep.

Hunter declined courteously, explaining that we had full equipment in the boat. We went back to the shore. The lady was made comfortable in the boat, and two cots for the men were perched on the high flat deck of the ferry barge. Both craft were then pushed off from shore, as a precaution against bandits, and anchored in midstream.

One of the crew was placed on watch. We lay gazing up at the stars. Gradually a blanket of river mist covered us.

In the morning our blankets were so soaked with mist that we could wring the

The canal was now deeper, wider, fixed between permanent banks, and alive with traffic. The usual cargo boat was really

two boats united. As such a craft passed us, we could suddenly see "through" the boat where the two sections joined. Two hulls instead of one make shallower draft possible, and cleaning easier. Also the different sections can be taken to different places for loading or unloading.

SMILE WHEN YOU SAY "SON OF A TURTLE" IN CHINA

Green Mountain King flung his net and drew in some toothsome fish that added zest to the menu for both crew and passengers. With less success he tried to snare turtles which lay on the mud along the water's edge. He politely referred to them as "round fish." The word turtle is considered improper, since it is used only in curses; and to call a man "son of a turtle" is the worst of insults.

Roofs were being re-mudded against the coming rains. The fields were still dry in spite of the shower following the rain rites; and sweeps were being used to raise water from the canal to the fields. In some places water was being pumped from a well, the bottom of the well being connected by a tunnel with the canal.

Throughout this country cotton was being grown by behest of Japan, which has undertaken to buy all the cotton North China can produce. American varieties have been acclimatized in experimental farms operated by Japanese agriculturists. The seeds are distributed free to the farmers.

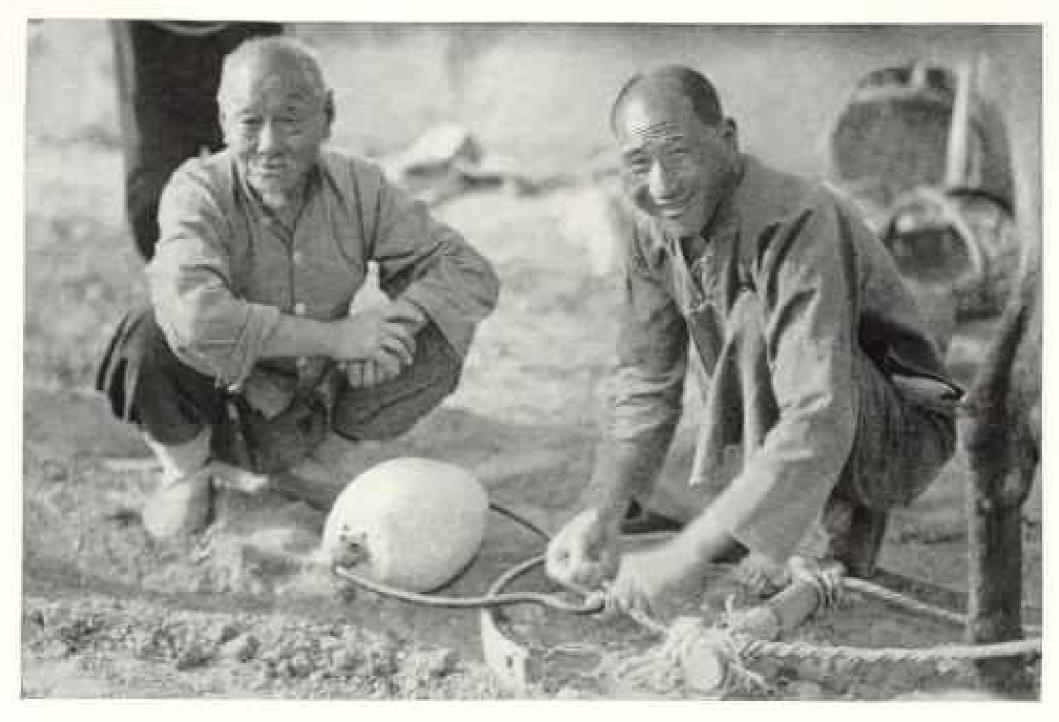
Cables across the canal served as guide lines for ferry barges. Traffic must either push the cable up and crawl under, or call to the ferryman to sink his cable so boats

can pass over.

One ferryman had contrived a different scheme. He anchored one end of a cable in the mud bottom midstream and made fast the other end to his ferry. Keeping the cable taut, he would swing in a downstream arc from one shore to the other. The strong current would carry him through the first half of the semicircle so smartly that the momentum and only a few pushes of the pole brought him up to the other bank.

POLICE STATION IN AN OLD TEMPLE

An aquatic moving van passed. The boat was loaded with valuable household goods traveling under police escort. Atop the pile three policemen perched with their rifles. The constabulary flag waved above them,



FRIENDLY FARMERS DEMONSTRATE AN AGE-OLD DEVICE FOR COVERING SEED

After the plow has opened the furrow and seed has been carefully planted with fertilizer, the horse-drawn, crescent-shaped scraper covers it up by pushing the hills of dirt toward the center. Behind comes the stone roller, pressing down the loose soil so the wind will not blow it away. About a third of the cultivated area of Hopeh Province is devoted to millet and sarghum.

a warning to raiders that there must be no interference with the rich man's possessions.

Night fell as we came to a considerable village. We determined to pass on, for the place was, in Chinese parlance, "hot and noisy." But, as we learned later, there had just been a kidnaping a few miles away and the local police were nervous. They promptly pursued us and invited us to spend the night in the police station!

It was explained to us that this was purely for our own protection. But was that a glint of suspicion in the chief's eye as he pried about in our belongings and investigated the hold?

At any rate we returned to the hot and noisy spot. Landing by the light of oil lanterns among a crowd clustered about jugglers and strong men balancing stones, we were escorted through dark alleys, where black dogs leaped snarling from doorways, to the police station. That edifice was an old temple where the constables had moved in with the gods.

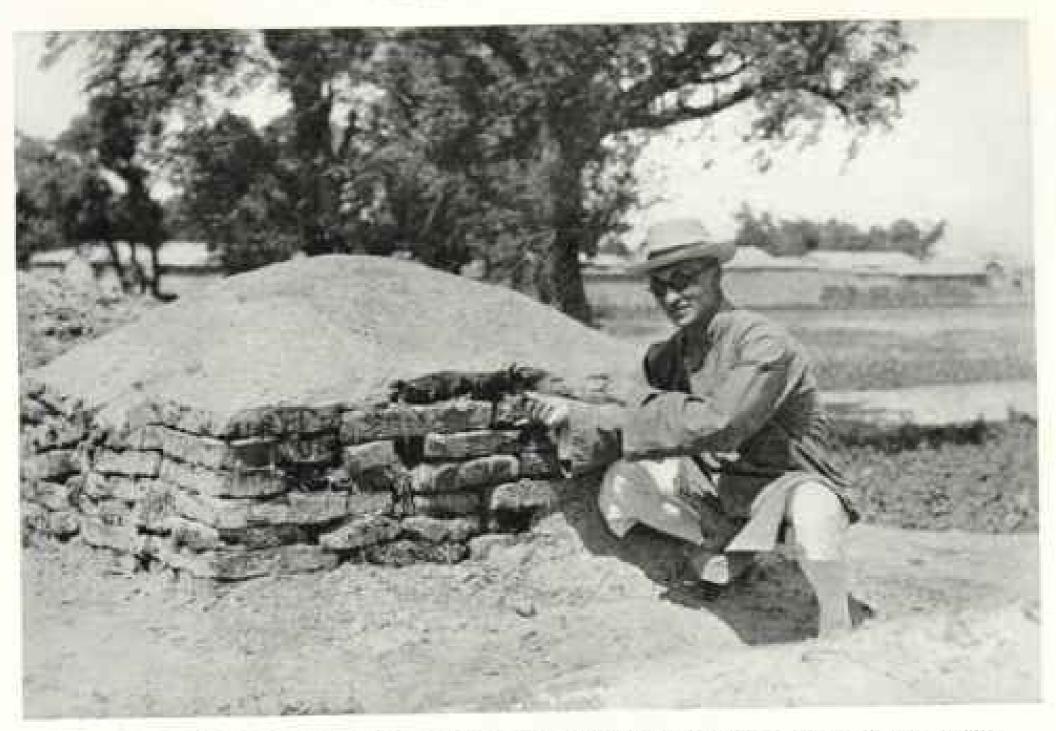
The great gates of the high courtyard wall clanged; the crowd was shut out and we were shut in. Then came innumerable questions, running on until close to midnight. The examination was courteous, but exhaustive and exhausting.

At last we were permitted to sleep on the cots of a barracks hall in the company of a guard, a portrait of Sun Yat Sen, and a hungry horde of sand flies. In the morning our jailers, or protectors, now most cordial, sped us on our way.

The sight of this day was the great lock and dam constituting the control station of the north branch of the Grand Canal. This dam prevents floods from inundating Tientsin, and it diverts into an emergency channel the flood sediment that would otherwise silt up Tientsin's harbor at Tangku (page 504).

IN THE LAND OF THE DEAD

Soon we were skirting Tientsin—for the main waterway does not go through the city. Then on south toward the Yellow River, We were now passing through a land of the dead. Some have estimated that, in the densely populated provinces, five percent of the arable land of China is obstructed by graves; in some localities it is more than



WHEN A FARMER TIRES OF HIS BED, HE MOVES IT OUTDOORS FOR FERTILIZER!

After years of use, the bed is impregnated with smoke from the fire which heated its hollow interior. Thus chemically enriched, the mud and straw bricks make excellent fertilizer. "It was odd," writes the author (page 507), "to see a man with a sledge hammer breaking up his bed, as if in revenge for sleepless nights," A mud roof protects the bricks until the farmer is ready to pulverize them.

nine percent. Here at least 80 percent was so pre-empted (page 495).

The Government of China has ordered that henceforth all dead shall be buried in cemeteries, not in the fields. But it is doubtful whether such a law can be en-

forced, since it flouts age-old custom.

About six miles below Tientsin our voyage in the "net boat" abruptly ended. We continued on foot along the bottom of the Grand Canal!

Like the Israelites we went dry-shod for the waters had been held back at Machang and diverted into a branch canal so that the main channel might be dredged deeper and wider (page 505). Boats, stranded in mid-channel, lay waiting.

Weary of walking, we went on and on by ricksha, then by train.

A stretch of about fifty miles had been excavated: a month after our visit it was again opened to traffic. Below Machang a small steamer carries travelers farther. Firstand second-class passengers ride on the steamboat, third class on the barge towed behind. Then come hurdles—silted portions of the canal that have not been cleared for decades and make uninterrupted progress from one end of the Grand Canal to the other impossible in this day.

We went no farther, since our special study for the time being was North China, and turned aside to visit Shansi Province, with its lovely twin pagodas, its cave dwellings in the loess cliffs, its coal and iron in which Japan is interested.

NEW RAILROADS PLANNED

New railroads are planned to transport the raw materials of China which are needed in the industries of Japan. But the extension of railroads will not eclipse the Grand Canal—in fact, it seems destined to have a new lease of life. Increasing trade demands its increased use, and there are official plans for dredging the entire channel.

Even then, there will still be slight interruptions where boats must be hauled up or down stone barrages, since the level of the canal varies, sometimes as much as thirty



GRACEFUL AS A DANCER, CAPTAIN GREEN MOUNTAIN KING FLINGS HIS NET

The meshed fabric, folded so that it looks hopelessly tangled when first opened, spreads out smoothly as it settles into the water. Fish dinners were enjoyed by passengers and crew, thanks to the Captain; but luck was not so good when he tried to snare turtles in the canal (page 511).

feet. Of course these barrages may in time be replaced by locks.

After following the bed of the Pei Ho above Tientsin and the bed of the Wei below, the canal steps upward by barrages, traverses the Yellow River with perilous turmoil of cross-currents, reaches its highest point at Nan Wang, where the Wen River enters, lazies through a series of lagoons, then swoops with strong and dangerous current to the Yangtze River.

PART OF CANAL 13 CENTURIES OLD

The latter stretch is probably the oldest part of the Grand Canal. According to one of the books of Confucius, it seems to have been built about 486 B.C.

The waterway makes use of the Yangtze for a short distance upstream, then turns south again and moves in stately fashion through Soochow to Hangchow.

The Grand Canal is the backbone of China, the Yangtze and Yellow are its ribs. Life tends to grow up around waterways—think of the civilizations of the Nile, the Euphrates. The oldest Chinese life some of the oldest human life, so far as present incomplete evidence testifies seems to have developed in the Yellow River Valley and along the northern rivers which were later to be integrated as the northern stretch of the Grand Canal.

In this unthinkably ancient land great changes are today taking place. They have political, social, industrial significance. And yet, when all is said for them, they are bubbles on the surface. Beneath them the old China moves on, placid, persistent, with a "sure instinct for life."

The powerful undercurrent will go straight on, carrying the strength and conservatism of the old China into the new. And if we are reincarnated a few millenniums hence and take another boat trip in this land, I think we shall not be in doubt: we shall still recognize it as China.

THE SAGUARO FOREST

By H. L. SHANTZ

Former President, University of Arizona

"TO, No!" said my friend from the East. "It cannot be true! It must be the tequila I had in

Nogales!

Little wonder that he doubted the accuracy of his vision. He was looking out for the first time from the crest of a hill over that wilderness of unreality, the Saguaro National Monument east of Tucson, Arizona.

Before him, limned in olive green against a yellowish-green foliage of mesquite and creosote bushes, the giants of the cactus world stood like immense fluted Greek columns, mile upon mile of them, stretching as far as the eye could see to the very base of the lofty Santa Catalina Mountains.

A FOREST OF CACTI SEEMS UNREAL

We call this a saguaro (often spelled sahuaro) forest, and it requires trees to make a forest, a dense stand of trees at that. Surely no cactus can rank as a forest tree! But there they stand, mighty trunks two to three feet through, rising 15 to 40 feet high, often branched, the huge branches a foot and a half in diameter, the larger plants weighing probably from six to ten tons each.

The stand in places is as dense as that of the yellow pine in the Rockies or even that of the red pine in Michigan and Minnesota or of the long-leaf pine in the South.

My friend's bewildered amazement brought back to my mind one of my former

trips through this area.

An old trail leads across the footbills just west of the Tanque Verde Mountains and connects the Tanque Verde Creek with the railroad station at Vail, Arizona. Late one November afternoon several years before, Dr. D. T. McDougall and I had been picking our way carefully along this route over the rocky hills north of Vail.

We looked out over a broad valley to the peaks of the Tucson Mountains thrust up in a bluish-purple haze on the western skyline, and north to the peaks of the Santa Cata-

lina, just tipped by the setting sun.

A wild, weird place it was, with strange forms of vegetation on every side, a rocky, steep arroyo at the right, the yelping of a coyote echoing against its banks, and beyoud it the desert slopes of the Tanque Verde Mountains.

We recalled similar experiences in distant lands. In fancy we saw again clouds drifting across Table Mountain in South Africa, and the waves dashing against the shore, the slopes a garden of proteas, ericas, gladioli, silver trees, and geraniums, plants known in America only as greenhouse plants, but there wild and natural and different.

We thought of the fern-carpeted redwood forests of California with light streaming diagonally past the great trunks, old, stately, grand, and inspiring beyond words; and of the equally interesting cedar, hemlock, and Douglas fir forests of Oregon, Washington, and British Columbia.

We talked of the massive baobab trees of Africa, different and attractive with their swollen trunks and large white flowers and

cream-of-tartar fruits.

Close at hand we had the Idria of Mexico, a tree with pointed columns widened at the base, related to the scarlet-tipped ocotillo.

We had wandered far, both of us, and had seen most of the wonders of botany; yet we agreed that the saguaro forest was unique in our experience.

THE CONQUISTADORES NAMED THE SAGUARO GIANTS

As we listened to the hum of a transcontinental plane passing overhead, we recalled the records of this historically oldest portion of the United States. The Pilgrim Fathers were unborn, for the year was 1539. when the first white adventurer gazed upon the immense forests of giant cactus. The Seven Cities of Cibola were not yet proved a myth.

Coronado and the Conquistadores, marching north next year from Mexico City in search of the cities of gold, also found the giant cacti and named them saguaros.

A century and a half had been ripped from the calendar of the ages before this forest was again visited by a white man.

This time a man of peace looked upon the fluted giants and wondered at the marvels wrought by the divine Creator. The highly educated Jesuit, Father Eusebio Francisco Kino, did not pass on northward as did Coronado, but remained to build the beautiful mission, San Xavier del Bac, which we



Photograph by H. L. Shantz

FREAK BRANCHES RESEMBLE A CLUSTER OF TOY BALLOONS

Buds of this saguaro, instead of developing normally, grew into globular, chainlike branches, one on top of the other. Within the mass of entangled arms a prickly pear is growing, dependent entirely upon showers for moisture.

could see standing out pure white in the haze of the sunset far to the west. Construction was begun about 1700.

The white man was a late comer in this region. At our right were the rocks on which primitive man had written in pictures centuries before.

Everywhere were pit houses and old grinding places; and at our left and farther north lay a great pueblo like the Casa Grande. It is now a university project, where the youth of today will study the civilization of the distant past.

Before the Spaniards had set foot on American soil, even before the Romans had entered Spain, this land had been used by man; the fruits of the saguaro had sustained him, and the forms of these giants had influenced his arts. Everywhere the area lives in rich relics of past civilizations.

Looking back toward the old pueblo, we thought of the Mormon Battalion, a half thousand determined men, their wagons drawn by tired and famished mules, pushing cautiously up to the walled city of Tucson in December, 1846.

It was the strongest presidio of Sonora, well garrisoned, walled, and equipped with cannon. Not surprising was it that the half-naked, half-fed, and half-armed Mormon band approached with apprehension.

A few days before they had been attacked by wild bulls on the San Pedro, where they had lost several mules and in self-defense had killed from 20 to 60 of the cattle. But the citizens and soldiers of Tucson alike deserted on their approach. The former soon returned and furnished flour, meal, tobacco, and quinces for the men of the battalion, and grain for the mules.

The "Old Pueblo," now a part of Tucson, is the natural gateway to the saguaro forest. The city of Tucson was first an Indian village, later a Spanish settlement, then a pioneer town. Now it is a modern



Photograph by A. H. Baeliman

GENERAL JOHN J. PERSHING INSPECTS A "PIPE ORGAN" IN THE SAGUARO NATIONAL MONUMENT

The General of the Armies of the United States, who is a Trustee of the National Geographic Society, winters at Tucson, Arizona, and is a frequent and interested visitor to the forest of giant cacti. Here the guide points to a clump of saguaros that have not yet formed branches. Arms of the one beyond General Pershing have protruded from the trunk and are beginning to grow upward (page 529).

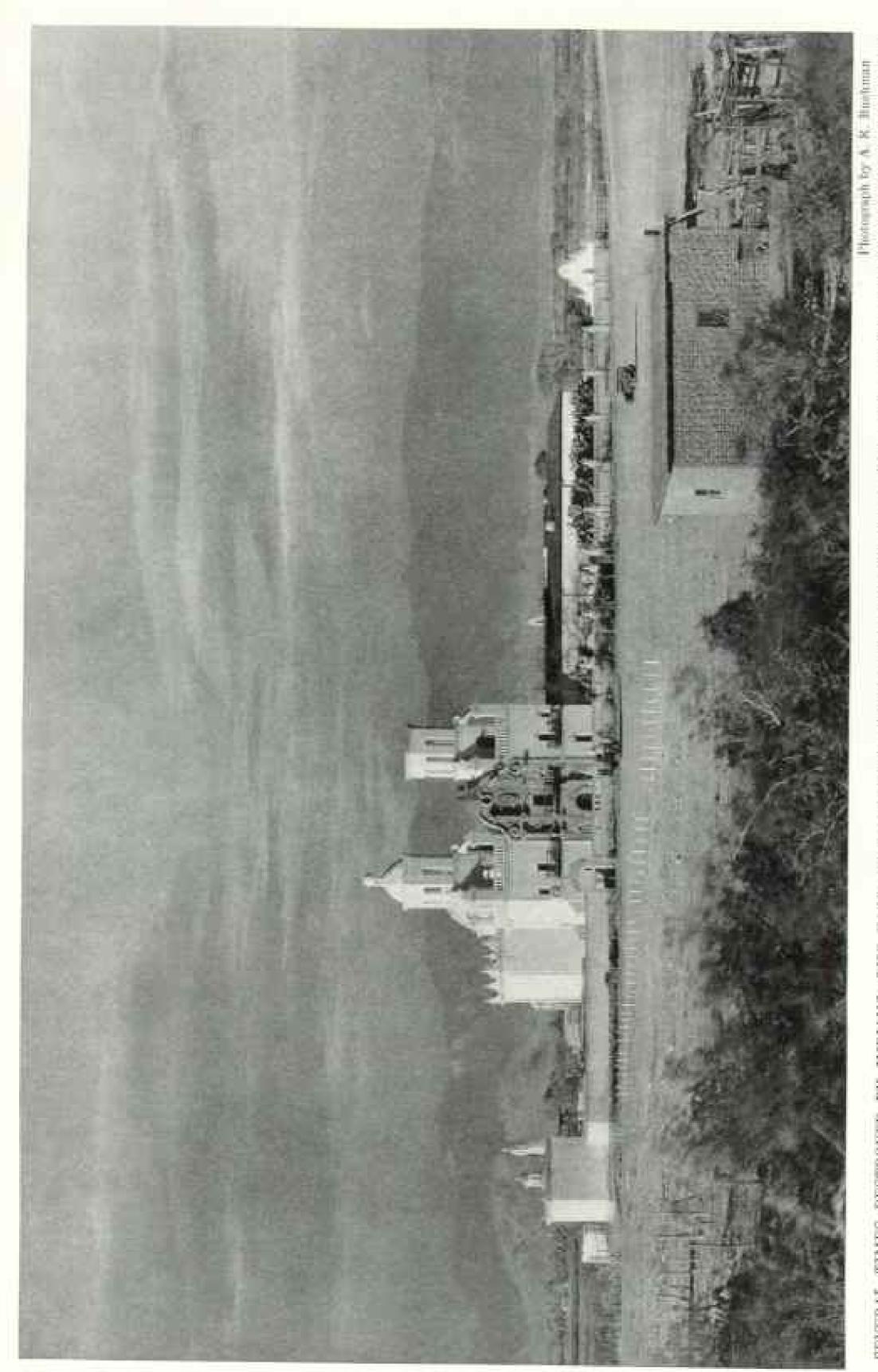
university city. It was a walled city when the Declaration of Independence was signed, and remains one of the oldest communities in the United States. Still retaining something of the Spanish atmosphere, it is the home of the cattlemen of the old southwestern ranchos.

A DESERT THAT IS NOT DESERT.

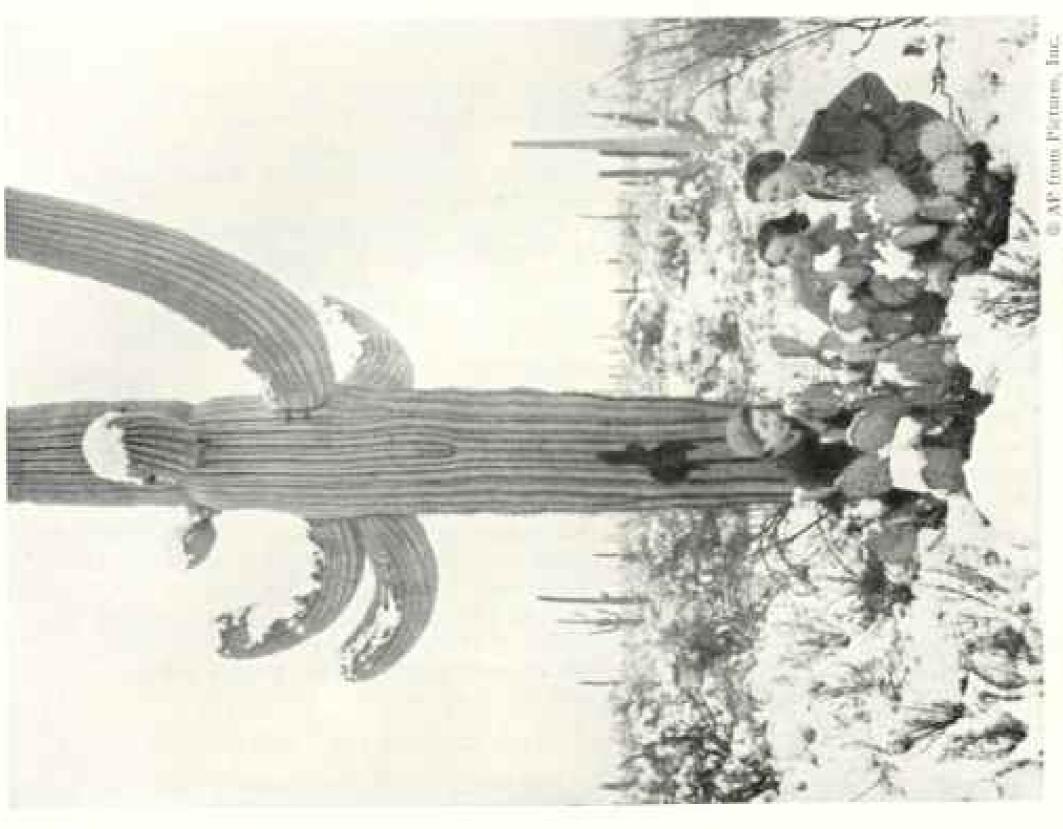
The desert about Tucson is unusual; perhaps it should not be called a desert. It is marked by broad expanses of creosote bush with delicate, lacy, deep-green, lacquered leaves which glisten in the sunlight, hardly in keeping with a desert environment.

In places we saw the creosote bush give way to many species of cholla, treelike Opuntias with never-ending change in form and color. Some of them are almost snowwhite with back lighting due to large sheathed spines, while others are slender and in varying hues of green.

The whole is splashed in the early spring by a rich and varied display of flowers and later in the year by varicolored fruits.



Spanish Fathers established the shrine near a spring about 1700, when Arizona was a Mexican mission. The present structure, completed in 1797, was abandoned 26 years later. At intervals since then red men have used it as a church. Today it is part of the Papagos Indian Reservation, mear Tueson. San Xavier's founder, Father Kino, recorded that he grew wheat, make, grapes, and melons. The Papagos still grow these crops on their farm lands near the mission. SEVERAL TIMES DESTROYED BY INDIANS, BUT EACH TIME REBUILT, SAN XAVIER DEL BAC GLEAMS LIKE A WHITE JEWEL SET IN THE DESERT



THE PLUMBING OF A CACTUS BECOMES ITS SKELETON SNO

Woody sylem tubes carry sap up living saguates. When woodpeckers cut through the pipes detour channels are developed (page 530). The strang strands help to support the plants, which sometimes grow 50 feet tall and weigh 10 tons or more, Skeletons of dead eacti often stand upright for years.

SNOW ON A CACTUS, JUST ANOTHER OF NATURE'S TRICKS!

Delighted by the beaviest snowfall in 35 years, girls here inspect purplish flatlobed Opantias, and find that little harm resulted from the flarry. The photograph was taken January 8, 1937, in the Saguaro National Monument, near Tucson. The tuna, or flat-stemmed Opuntia, forming low masses, is covered in the spring with yellow or purple flowers and later in the year with large, deep-purple or carminecolored fruits. Nor is the beauty of the desert limited to cacti and desert shrubs.

The many kinds of flowering plants give constant change to the landscape. In winter plantains, primroses, and geraniums, and in summer never-ending displays of yellow and white composites, characterize the ground cover.

As we approached the sagnaro forest and traveled to higher land, the desert became more luxuriant and the paloverde appeared, a beautiful tree in which the branches are as green as the leaves and which in late spring is covered with a mass of lacy, lemon-colored flowers. This tree stands so close on the higher ridges that it constitutes what would be called in many parts of the world an orchard steppe.

Here also are occasional acacias and the desert hackberry. The latter, a low tree or shrub, is covered in September with light-red or orange berries so numerous as to give a decided tint to the whole plant. The berries are among the chief sources of food for quail and other birds, and the branches are thick and spiny so that they afford protection to the quail from the attacks of owls and covotes.

Another attractive shrub is the Lycium, a low bush often red with a heavy load of fruit, which likewise furnishes bountiful food for birds.

We saw numbers of the large barrel cactus, the bisnaga, which is in flower in late September. The barrels, leaning toward the southeast, are capped by dense crowns of copper-red flowers and later by light-yellow spineless fruits. This cactus has been used as a source of drinking water and also for making cactus candy, a practice generally discouraged since it was rapidly destroying one of the most attractive of the larger cacti (page 524).

The ground is sometimes completely covered with the papery flowers of the small white composite Psilostrophe or the somewhat larger and equally papery yellowflowered Zinnia.

The white buckwheat adds beauty to the desert; and the annuals, which spring up following the rains, carpet the desert floor with varied colors.

Probably at no time is the desert more interesting than after the summer rains in August or September when it becomes as green as Ireland. The masses of cactus flowers, however, come in March or April. There is something in every season to attract the botanist.

The watercourses are marked especially by a thick growth of mesquite, paloverde, acacias, and hackberry, and the landscape is at times colored by rayless goldenrod and the beautiful daisylike Baileya and small orange-colored hollyhocks.

The ocotillo, with its long wands, often five to fifteen feet in length and fringed with delicate leaves, is so unusual in appearance that it is noticed by every visitor to the area. On the approach of drought the leaves fall off, but after the rains the wands are almost immediately clothed again in delicate foliage (page 524).

In early spring the bare stems are tipped with scarlet flowers so brilliant in color that comparatively few on the side of a mountain will tint the whole landscape.

ENTERING A FOREST WONDERLAND

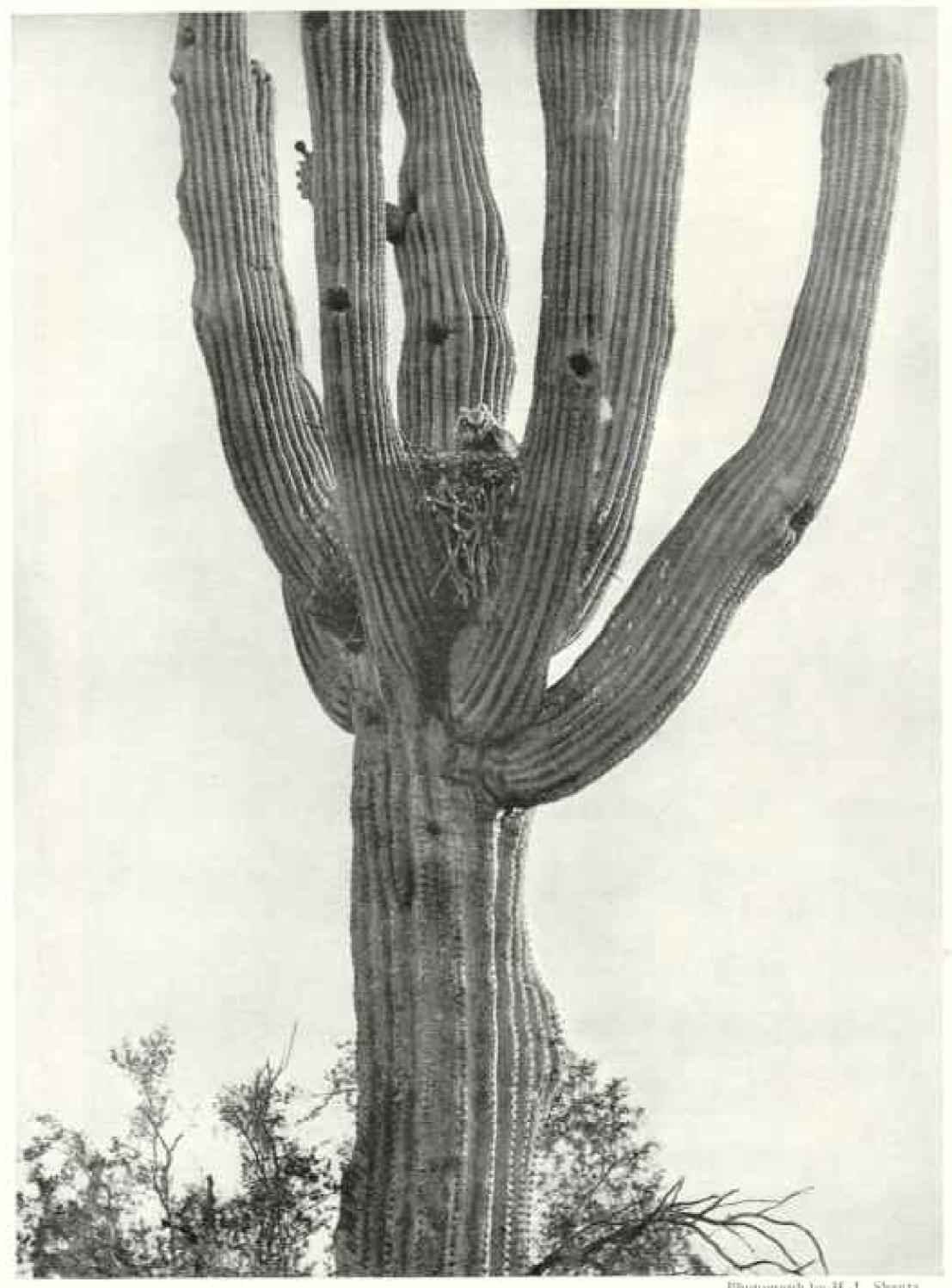
We had entered the Saguaro National Monument near the south gate, and passed first by an old claim shack, the owner of which first acquired the right to the land.

The few scattered mesquites, creosote bushes, and many of the yellow composites, paloverde, cholla, and ocotillo we had seen, had not prepared us for the sudden change just ahead.

Crossing a low ridge, we entered at once the foreground of the saguaro forest. Like the front rank of an advancing column, these mammoth plants stood out as an indication of what lay beyond the crest of the low hill ahead. From this crest the strange forms rose as far as we could see, scattered almost equally over the hills and flatlands and extending far up the mountainside.

Far to the north and east the trunks stood out sharply with their lighter green against the deeper green of the paloverde and mesquite. The prevailing color of the entire area was green, the mesquite an olive green, the saguaro a light olive, the tip of every great stem almost white with its cottony areoles and spines.

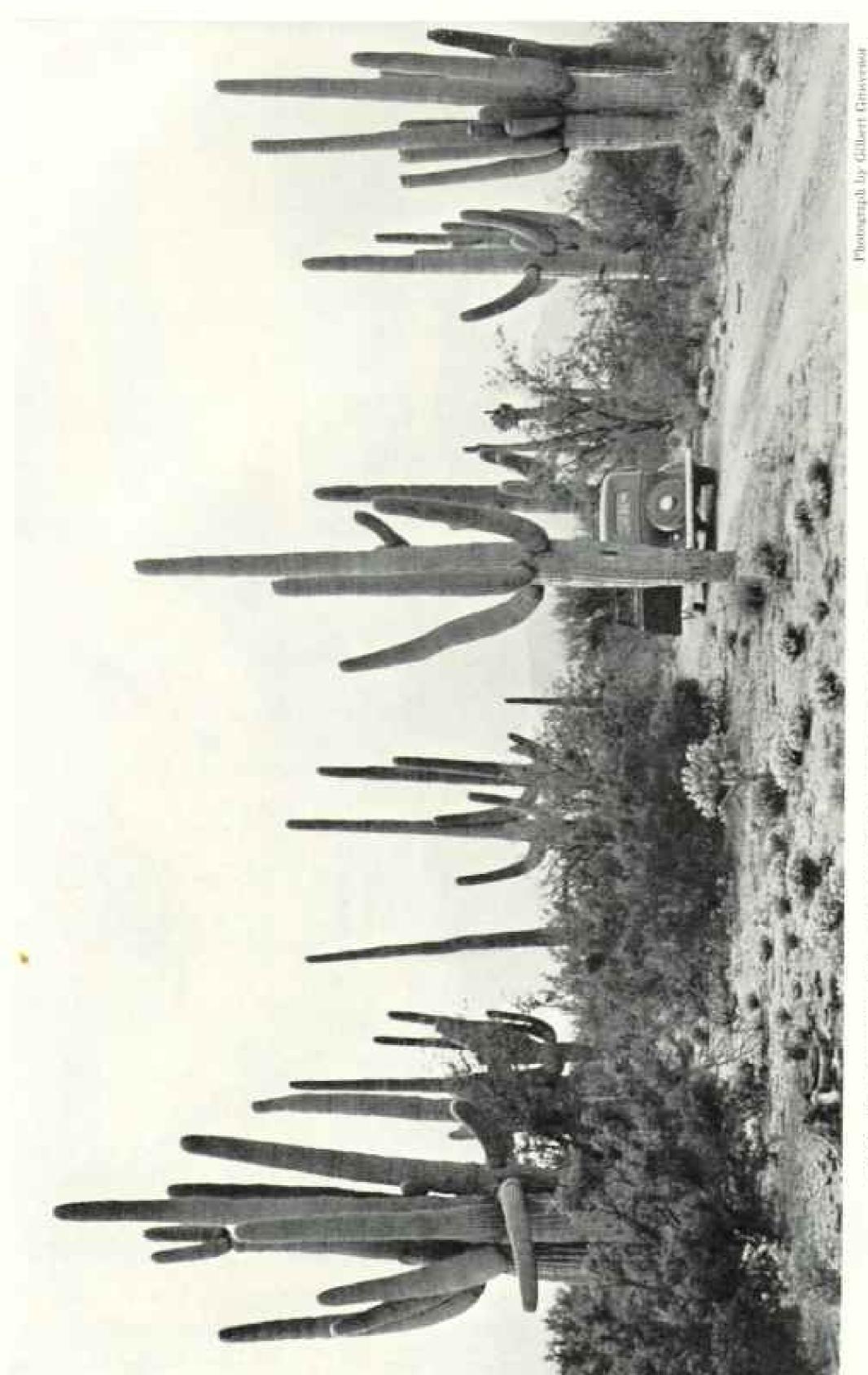
Passing on across a dry sandy wash, lined with mesquite and paloverde and acacia, and climbing the next ridge through an avenue of saguaro columns, we saw a never-ending variety of forms, no two exactly alike. Yet the pattern of development is very simple.



Photograph by H. L. Shunta

AS IF CLUTCHED IN A GIANT'S HAND, A GREAT HORNED OWL NESTS IN THIS SAGUARO

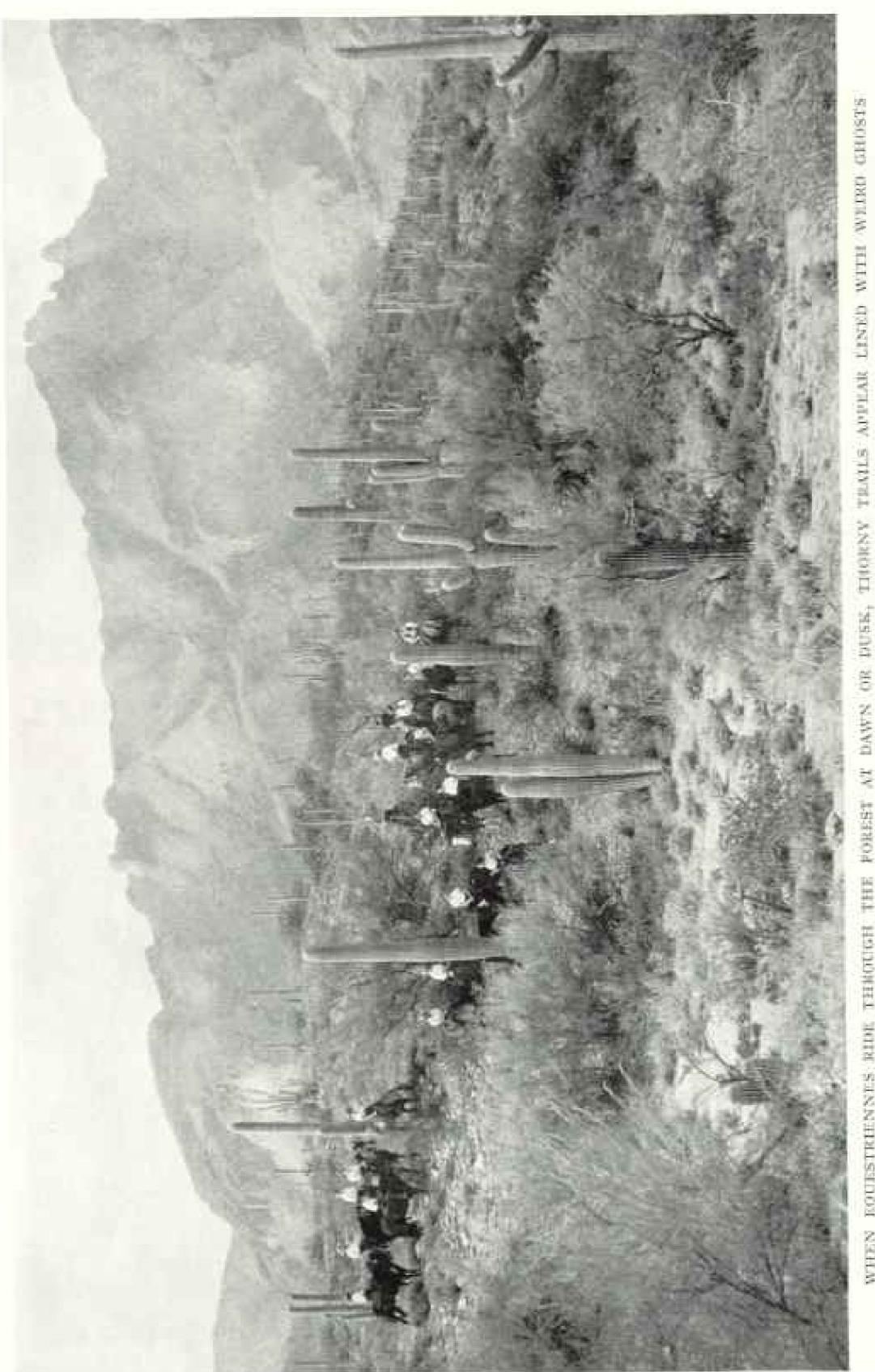
Flickers and other woodpeckers have drilled holes in the fluted fingers for their homes, but tiny elf owls now occupy some of them. President Hoover established the Saguaro National Monument, about 15 miles east of Tucson, Arizona, on March 1, 1933. It comprises 60,000 acres of billy, arid land, more than a half mile above sea level. Spanish Conquistadores, \$1 years before the Pilgrim Fathers landed at Plymouth, discovered the giant cacti and named them.



Рамондтара Бу- Сейвет Отмусткия

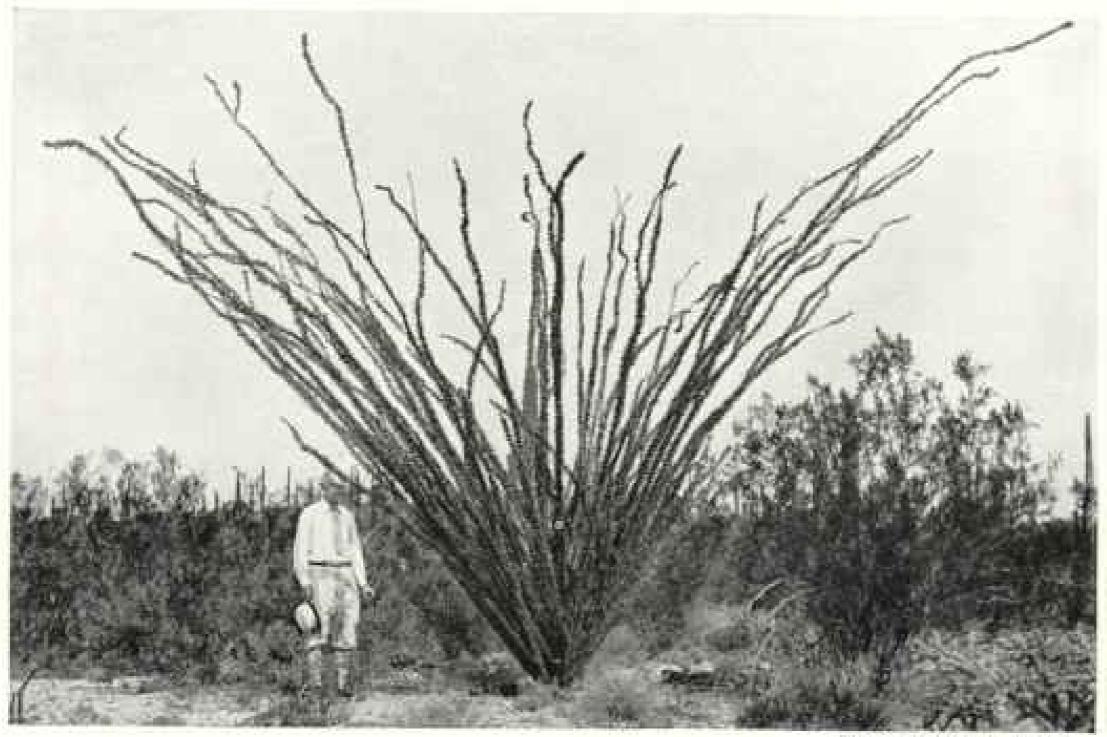
POOD AND SHELTER FOR THE INDIANS WERE THE STATELY SAGUARDS, TALLEST OF DESERT PLANTS

Red man made nirup and wine from the fruit, and pounded the shiny black seeds into flour. They fashloned cits for their hats from tough woody strands found inside the main trunk (page 532). When a fire is kindled at the base of one of these glant cacti, flames race over the tiny, dry spines. Warriors of the Papago tribe burned the plants as signals at night.



Some of them Since moleture is scarce, asguaros grow only an inch or two a year. Unlike true trees, they have no rings from which their spe can be exactly determined.

undoubtedly have lived 250 years or more. Indians browed a bitter tea from bushy greasewood, here seen in clumps among the carti-WHEN EQUESTRIENNES RIDE THROUGH THE



Photograph by H. L. Shantz

FLOWERY "LIGHTS" TIP CANDLEWOOD WANDS IN THE SPRING

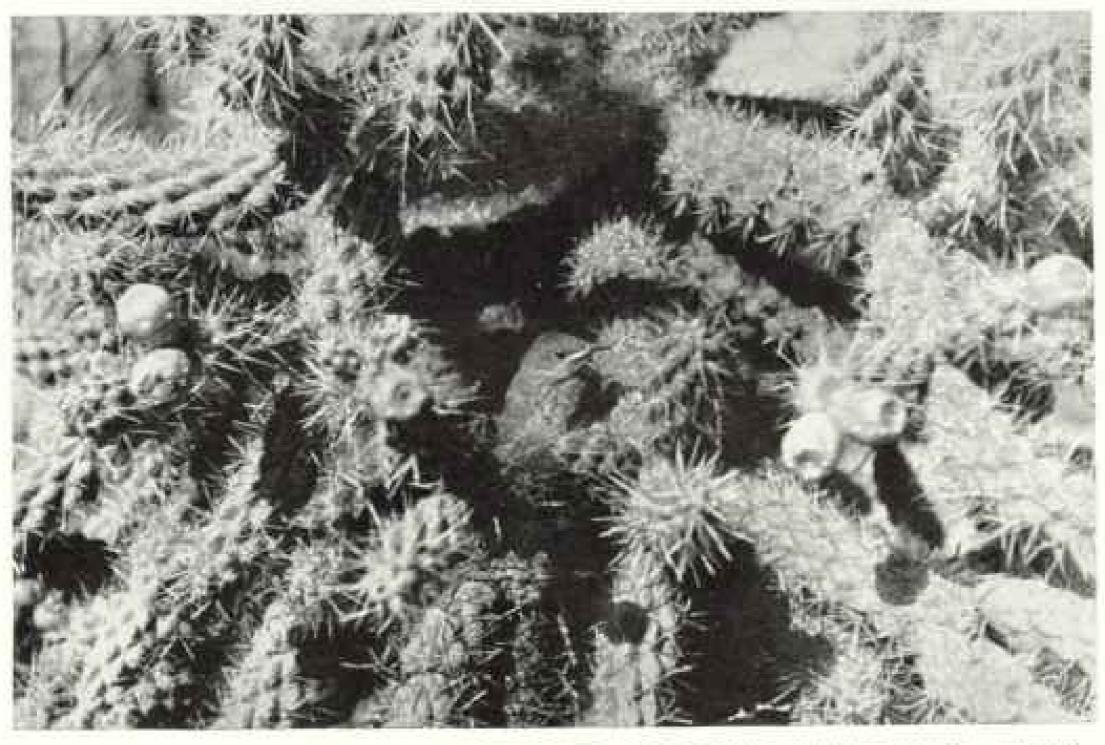
So brilliant are the red spikes of the ocotillo that a few bushes scattered over a hillside make it appear carpeted with flowers. Other names given the willowy plant, which is not a cactus, are "coachwhip" and "Jacob's-staff." Tiny leaves and thorns cover the branches (page 520).



Photograph by Gilbert Greevenor

WATER FOR THIRSTY TRAVELERS IS STORED UNDER THESE LONG BARBED SPINES.

To tap the barrel cactus, or bisnaga, cut off the top and expose the white porous pulp. Soon beads of clear water core to the surface. Bisnaga pulp, boiled in sirup, becomes cactus candy.



FEW ENEMIES CAN REACH THIS BABY THRASHER, SAFE BEHIND A "BARBED WIRE PENCE"

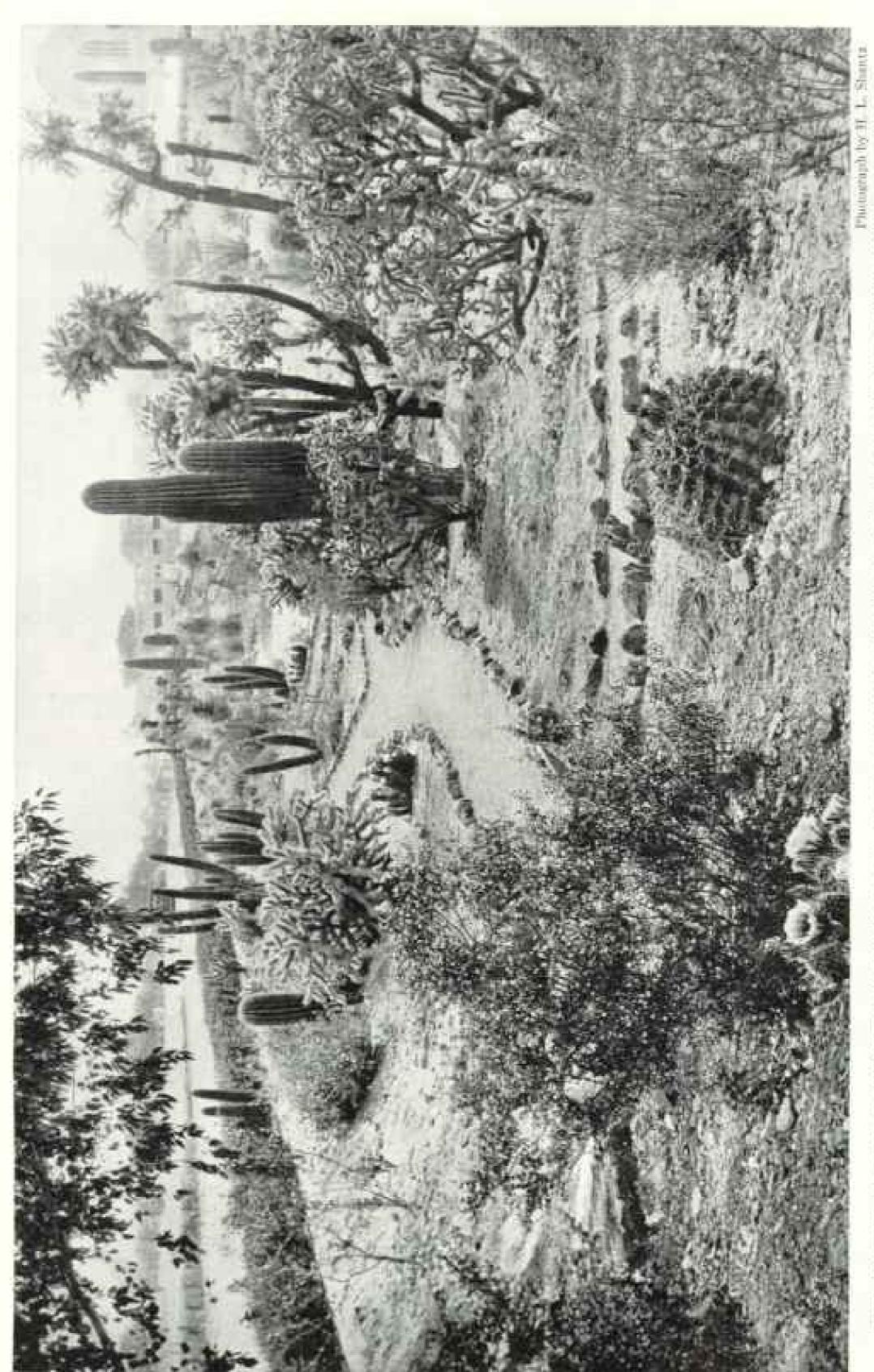
A camouflaging coat makes the bird hard to see, and vicious spines of the Opuntia thicket discourage pursuit. Greenish-yellow herries, visible here, often hang intact for several years. One desert denizen, the pack rat, fortifies its doorway with the joints of this cholla (page 531).



Photographs by H. L. Shantz

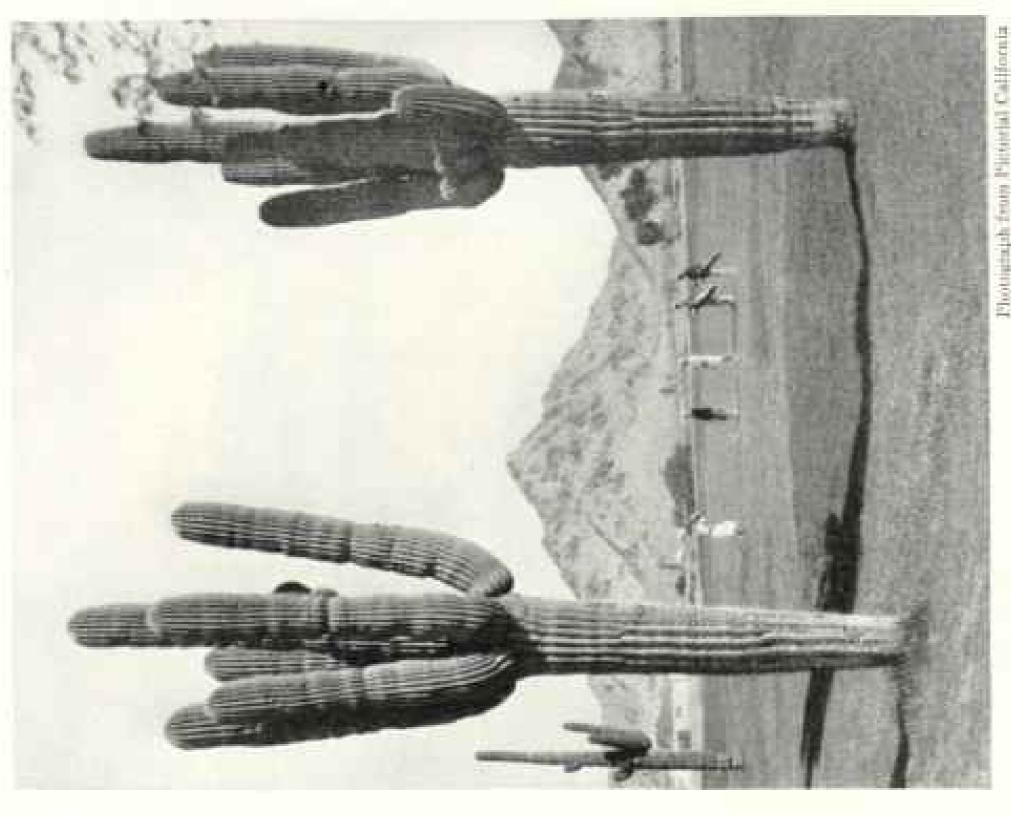
THE GILA MONSTER MAY HE SLOW TO ANGER, BUT IT HAS A BULLDOG GRIP

Though the bendy, black-and-orange reptile has no fangs, poison flows from its lower jaw like saliva, and works into the wound along grooved teeth. Naturalists believe that the plump tail is a reservoir of fat.

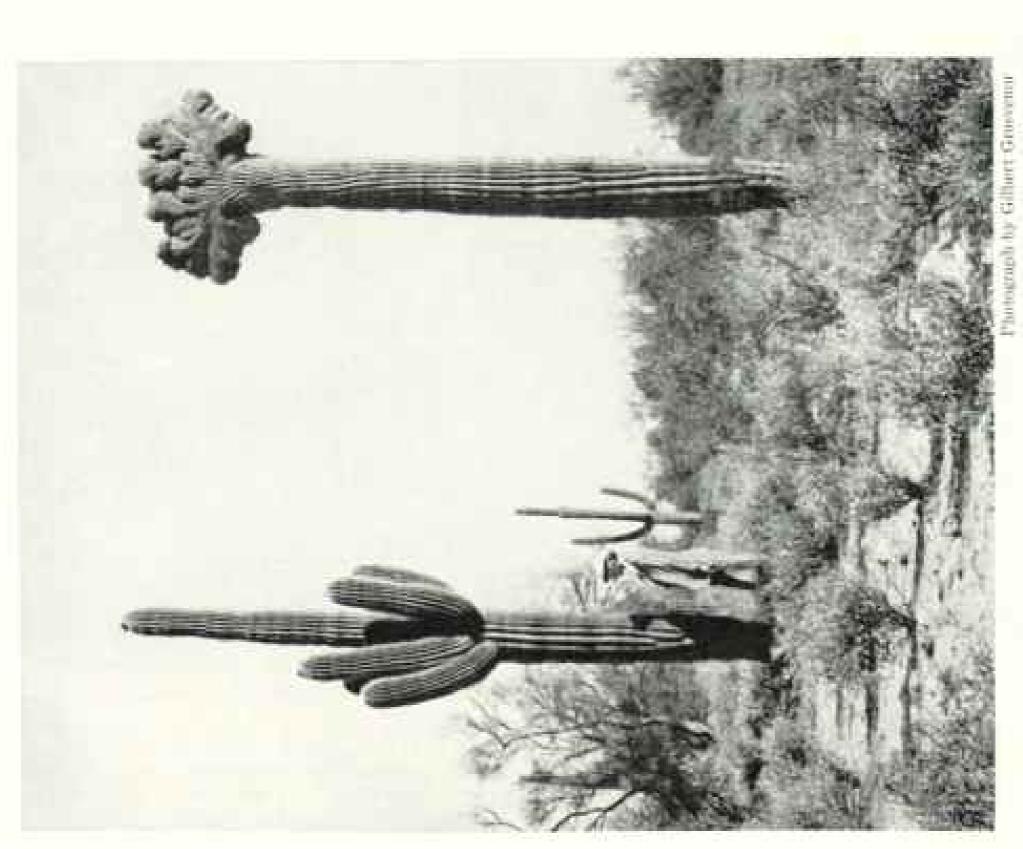


HAS A CACTUS GARDEN, WHERE PLANTS OF THE DESERT THRIVE UNDER CULTIVATION THE CAMPUS OF THE UNIVERSITY OF AUIXONA

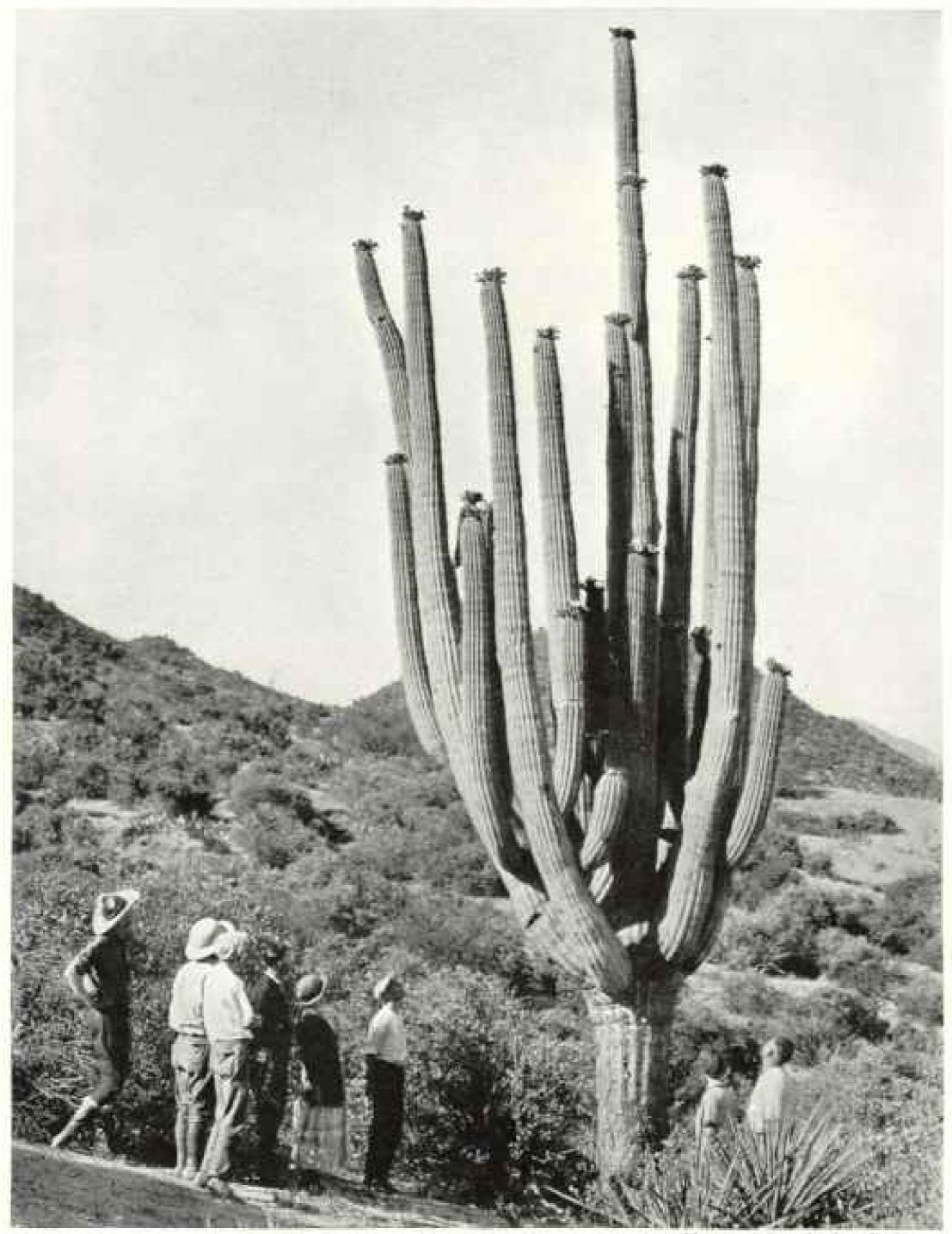
A thick augusto stands next to y every plant that grows in the region. Hedgehog cactus blooms in the left foreground, and just beyond I harther back, is a cholla, with several forked organ pipe cacti near by: young barrel cactus grows in the right foreground Students, sauntering along these paths, see specimens of ne is a clump of creasote bush. Resembling a coral growth, sti the path near the center, and to the right are other chollas. A



CONOTES, "dogs that have learned to yode!" (page 529), sometimes provide over the links at Phoenix. Rugged Squaw Poak rises in the background.



Injury of some kind when the signary was young caused its crown to grow in the unusual shape. Another deformed cactus is called the "fan."



Photograph from Southern Pacific.

WHITE BLOSSOMS TIP THE FINGERS OF THIS SAGUARO ALONG THE OLD APACHE TRAIL

What appears to be a single mammoth flower on each branch is actually a cluster of many blossems. Plants generally bloom in April or May, and the cucumber-shaped fruit ripens about midsummer (page 531). A "sapling" cactus has a single trunk. When this grows to about 20 feet, buds appear halfway up its sides. These knobs first grow out at right angles to the main column and then turn upward or hang down in curiously contorted positions to form branches 10 to 15 feet long (page 522). A fascination of the Arizona desert is the endless variation in the branching of the saguaros. The above specimen is a familiar form.

Columns rise from 18 to 20 feet in height: then from the sides a little more than half the way up, buds push out to form the branches. These branches are constricted a little where they leave the stem but come out always at right angles. They soon bend upward, and vary from mere buds to large trunks 10 to 15 feet long and up to a foot and a half in diameter.

Next we passed through a luxuriant bottomland marked by Opuntia, mesquite, acacias, and Baccharis. In a wash we saw a desert willow, one of the attractive trees of the Southwest. Desert gourds may be found either on the ground or in the trees, together with the wild tobacco and Verbesina.

WANDERING IN A DREAM FOREST

Again we climbed a steep ridge through columns of giant saguaro and came out upon a plain studded with an unusually fine group. The stand is as dense as that of an ordinary yellow pine forest, and the variation from plant to plant far greater. Here are plants with arms twisted in curious fashion, others standing as lone columns, and still others clustered in close groups.

Not the least interesting are the skeletons of old saguaros from which all the cortex has been weathered away, leaving only a riblike trunk. At the bases the ribs have grown together into a woody structure, but higher up these bundles separate and form long woody rods. These will stand for years if not cut down or destroyed by campers or woodcutters (page 519).

After leaving this wonderland and passing again through a luxuriant wash and bottomland, we climbed a hill marked with the
silvery foliage of Encelia, and beheld from
the top one of the most interesting views in
the whole area. Here the cacti stood so
close together that we saw only a mass of
saguaros. In the foreground their lightolive trunks were clear-cut against the rich
green of the paloverde and mesquite.

Probably the best time to get the full significance of the area is in the afternoon when the setting sun lights these trunks and brings out every plant within the range of the eye. A veritable thicket of saguaros rises north and east and even south, and trunks can be distinguished standing far up against the mountain.

We went on and on, feeling that each view was better than the one before. On one side of us four great trunks formed almost a single plant, and on the other was a mass of a dozen or more in a single square rod. There were odd, fasciated forms, forms twisted by unfavorable environmental conditions, forms with grotesque arms and irregular ribs.

A WILD CREATURES' PARADISE

As we left the hills and crossed a plain studded thickly with saguaros, we heard the voice of a covote, that dog that has learned to yodel. He was standing on a ridge, yelping his resentment of our presence. An ample supply of California and antelope jack rabbits, banner-tailed chipmunks, and spermophiles supplied him with abundant food.

We saw the fresh track of the Mexican mule deer, a beautiful large animal which occupies the lower desert area while the more abundant and more wary Arizona white-tail ranges farther up on the Rincon slopes. A small herd of mule deer from the overstocked Kaibab National Forest had been liberated here, and a spotted fawn we saw may have been an offspring of this herd, for they apparently feel at home.

The desert bobcat, tall, tawny, alert, a fee of Gambel's quail; the Mexican cougar, or mountain lion; and even the rare but more interesting jaguar, with its rich coat of dots and circles, and the smaller ocelot, have been found here.

From a high ridge we watched a band of peccaries working their way from bush to bush, rooting out the grubs from cactus plants, the larger leading, almost like a band of baboons in the African semi-desert. Because of favorable feeding grounds and breeding conditions, this area is a population center for the peccary in Arizona.

Two foxes, the desert gray and the kit fox, are trapped for fur.

Birds are everywhere, and we were at once attracted by the unusual environment and the use our feathered friends have made of the saguaro plants.

Of all the birds found in the area the most closely associated is the gilded flicker, since its range practically coincides with that of the giant cactus. It is responsible for most of the nest cavities drilled into the trunks and branches of the older cactus plants.

The Gila woodpecker must of necessity limit its distribution to regions where there are trees in which it may hollow out nesting places. Below the oak belt and above the



Photograph from Southern Pacific

SAGUARO TRUNKS GROW PAT AND FULL DURING WARM SPHING RAINS

Sometimes they absorb so much water that they split down the sides. In summer, when moisture is scarce, trunks contract, and the fluted ridges close up like an accordion bellows. Flowers usually occur at the tips of branches, but here they crop out on the sides.

cottonwood-lined bottomlands the easily penetrable saguaro furnishes the proper nesting places. The birds quickly pick out the soft pulp, when the tree is in its natural state, but the saguaro soon coats the opening with a corky layer so hard and resistant that, when the whole plant dies, this protective patchwork weathers out and remains for years.

Near the base the strands of wood, or xylem, are united to form a perforated trunk, but near the top they are separated and stand up like parallel whips when the pulp rots away. The woodpecker often cuts these off, and the plant develops detour channels to carry the water around the break. The tiny elf owl, a pygmy of this large family of birds, will reward a stay in the forest until sundown. Nesting in the saguaro stems, it sounds its plaintive call just at sundown. The elf owl seems to be almost entirely dependent upon the saguaro and its woodpecker fauna for its home, at least within the range of the giant cactus.*

The purple martin and the lovely little desert sparrow hawk, which does not live on sparrows but mostly on grasshoppers, also use the ready-made woodpecker nest sites. The latter bird is unknown in the

* See "Shadowy Birds of the Night," by Alexander Wetmore, NATIONAL GEOGRAPHIC MAGAZINE, February, 1935. hot, sun-baked, man-made nest boxes in the Southwest, but finds a home to its liking in the cooler nests sunk deep in the watery

pulp of the giant saguaro.

Other birds of more casual or accidental relationship to the saguaro are some of the larger hawks, especially the western redtail, which often uses large branched specimens as nest supports; the western horned owl, which sometimes takes over the hawks nests; the cactus wren, which occasionally places its bulky retort-shaped nest in the crotches; and even the road-runner, which has been known to nest in saguaro stumps. The white-winged dove feeds largely on the pulp and black seeds of the fruit.*

The daylight bird of most interest is probably the road-runner, so named because in the days of horse travel it would often run for a mile or so ahead of a good team. The automobile has forced it to give up this

habit.

Reared in a nest on the ground, roadrunners feed mostly on grasshoppers and lizards. Anyone fortunate enough to see one of them catch a lizard is entertained by a most interesting performance. Pleased no end with itself, the bird dances about, ruffles its feathers, and swishes its tail up and down. It seems to appreciate attention and does not run away at one's approach.†

GAMBEL'S QUAIL AT HOME

Gambel's quail, abundant throughout the Southwest, nests on the ground, or, rarely, in a cholla or desert bush. Early and late these birds may be seen feeding in small coveys or, during and following the mating season, in pairs with or without the brood.

Some little fellows of this species, almost too small to be seen, scurried to cover on our approach. A lone cock sitting on a bush proclaimed to the world that he had found no mate and sang of his loneliness.

We saw the cactus wren with its nest in the cholla; the saucy phainopepla, always flying about, and many doves. In summer the large western white-winged dove feeds on the fruits of the saguaro, as do the western mourning dove and the small Mexican ground dove, the last-named distinguished sharply from the turtledove by its handsome brown wings.

* See "Game Birds of Prairie, Forest, and Tundra," by Alexander Wetmure, National Geographic Macazine, October, 1936.

[†] See "Parrots, Kingfishers, and Flycatchers," by Alexander Wetmore, Narional Geographic Magazine, June, 1936. Just after a rain, or early in the morning or late in the evening when the sun is not too bright, there may be seen some of the more characteristic reptiles, such as the red racer, a snake so swift that it can be caught only with the greatest difficulty. The black-tailed diamond rattler is a rather large and handsome snake which usually gives warning when anyone approaches.

Another desert creature, the Gila monster, is about a foot and a half long, beautifully colored in black and orange. Though it appears very slow and clumsy, it is capable of rapid movement. It feeds largely on birds' eggs (page 525).

Often in the area one sees the large black spider, the tarantula, which comes out

chiefly at night.

Developers of the park hope to keep it as a natural area in which animals of every type will be protected. Chipmunks dart across the road with tails held at angles, and the little gray spermophile stops at the entrance to its hole to salute the visitor with a quick jerk of its tail before it dives in.

One interesting animal will probably not be seen, although its home is visible everywhere. The pack rat builds up big piles of cactus joints and other material at the bases of plants, storing there quantities of food and making hiding places. The creature is so thoroughly protected from its enemies that the coyote, the bobcat, or even the skunk or peccary, would hesitate to disturb it in its retreat.

The desert turtle, a rich, deep brown with lighter brown markings on the top and bottom of its shell, is found throughout the Southwest. Specimens range in size up to almost a foot across. They feed mostly on cacti and other desert vegetation.

The desert is everywhere alive with interest, and here the entomologist will find a large and fascinating field. Even the ants have conspired to make the region interesting by building up their little piles of dirt, and the termites plaster over the base of the saguaro so that they may feed on the corky layer without subjecting their transparent bodies to the light.

During April and May, after the saguaro has reached eight to twelve feet, it produces flowers in profusion near the tips of the branches, the topmost buds usually opening last. These large white or slightly creamy flowers, two to three inches across, crown the massive trunk and give way to a mass of fruits which break open at the top



Photograph by H. L. Shants

CREAMY-WHITE SAGUARO FLOWERS ARE DISTANTLY RELATED TO THE ROSE

Funnel-shaped blooms which tip the arms of the giant cactus bear a resemblance to their relative (page 530). One flower has been sliced through its center (left) to show the arrangement of the petals, hairlike stumens, and long stigma. The avary, filled with numerous ovules, lies at the bottom of the deep throat. The smooth and waxy sepals, or coverings of the unopened buds, at the sides of the picture, are olive green, edged with yellowish brown.

and split down, exposing a carmine pulp, tains 99 square miles. It includes the high-

In this stage the fruits color the landscape and look like irregular flowers, being in many ways more interesting than the flowers themselves.

The fruit of the saguaro, with its pulp of brilliant carmine color and hundreds of small black seeds, furnishes excellent food for birds and man. The Papago Indians gather these fruits for dried sweetmeats, jams, and jellies, and the pulp is in taste comparable to that of the best watermelons.

THE SAGUARO IS A SLOW GROWER

These great monarchs start only from seed, and, hidden away under a paloverde or a Lycium or a mesquite, pass the first four to six years out of sight. Thus they are protected from trampling by grazing animals before they reach the diameter of a lime or small orange. Then they stretch, and at 15 or 25, or possibly 35 years, are "baby saguaros."

The Saguaro National Monument con-

tains 99 square miles. It includes the highest peaks of the Rincon Mountains and extends down to the desert on the south and west. A bench mark at the northwest corner, where the north gate road enters the forest, registers an altitude of 2,649 feet. The saguaros extend up to about 4,500 feet, and the top of the mountain reaches 8,500 feet.

The northwest part, comprising 15 square miles owned by the University of Arizona and private individuals, covers the best part of the forest. This portion has been fenced by the Civilian Conservation Corps.

The saguaros are easily destroyed. A bullet wound or the stab of a knife may kill the plant, whereas a larger cut may readily cork over (page \$30). A grass fire, a match applied to the spines, any slight hurt, may destroy the beauty of the saguaro. Therefore it is the hope of those interested in Nature, and especially in the luxuriant desert types, that the region will be held as a natural area, protected and kept for science and for future generations.

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ORGANIZED FOR "THE INCREASE AND DIFFUSION OF GEOGRAPHIC KNOWLEDGE"

To earry out the purposes for which it was founded forty-nine years ago, the National Geographic Society publishes this Magazine monthly. All receipts are invested in The Magazine itself or expended directly to promote grographic knowledge.

Articles and photographs are desired. For material which The Magazine can use, generous remaneration is made. Contributions should be accompanied by addressed return envelope and postage.

Immediately after the terrific eruption of the world's largest crater, Mr. Katmal, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. Four expeditions
have followed and the extraordinary scientific data
resulting given to the world. In this vicinity an eighth
unusler of the world was discovered and explored—"The
Valley of Ten Thousand Semicra," a vast area of steaming, spouring finances. As a result of The Society's discuveries this area has been created a National Monument
by proclamation of the President of the United States.

The Society cooperated with Dr. William Beebe in a deep-sea exploration of underseas life off Berminia, during which a world record depth of 3,038 feet was attained August 15, 1934, enabling observations of hitherto unknown submarine creatury. The Society also had the honor of enhantising a substantial sum to the expedition of Admiral Peary, who discovered the North Pols, and contributed \$100,000 to Admiral Byrd's Amurcule Expeditions.

The Society granted \$25,000, and in addition \$75,000 was given by individual members, to the Government when the congressional appropriation for the purpose was insufficient, and the finest of the giant sequous trees to the Giant Forest of Sequous National Park of California were thereby saved for the American people.

The Society's notable expeditions to New Mexico have pushed back the historic horizons of the southwestern United States to a period nearly eight centuries before Enlambus crossed the Atlantic. By dating the rains of the vast communal dwellings in that region, The Society's researches have solved secrets that have passed historians for three hundred years. The Society is spensoring an ornithological survey of Venezuela.

On November 11, 1935, in a flight sponsored jointly by the National Geographic Society and the U.S. Army Air Corps, the world's largest balloon, Explorer II, ascended to an officially recognized stritude record of 72,395 feet. Capt. Albert W. Stevens and Capt. Orvil A. Anderson took aloft in the gondola nearly a ton of scientific instruments, and obtained results of extraordinary value.

Hamilton appointed "WATCH OF AIRLINE ACCURACY"

TWA makes "railroad watch" standard for time aloft



THE GIANT new TWA "Sky Chief" faces
down the rump. As the cabin door is
closed, the stewardess glunces at her Hamilton, for her "log" must give departure time
on the nose. At every stop from coast to
coast, a score of times aloft, Hamilton accuracy serves "the Lindbergh Line."

Thus "the watch of railroad accuracy" now also becomes "the watch of airline accuracy." No matter how exquisitely dainty the debutante's watch, or how slenderly curved-to-the-wrist the man's strap model, accuracy is a strictly observed Hamilton law. Hamilton makes no watches with less than 17 jewels, no watches cased in less than the finest quality platinum, solid gold or gold filled.

Ask the leading jeweler in your city what watch be recommends. He'll probably, suggest a Hamilton; and with prices as low as \$37.50, there's no need to own less than the finest. Illustrated folder upon request. Hamilton Watch Company, 882 Columbia Avenue, Lancaster, Pennsylvania.

Elinear hairsprings sategnard Hamilton scentury against magnetic currents, temperature variations, susty linksprings. (Endusive Rosses under U. S. Elinear patents.) Accuracy doubly checked by the exclusive Hamilton Time-Microscope (Reg. U. S. Pat. Off.).

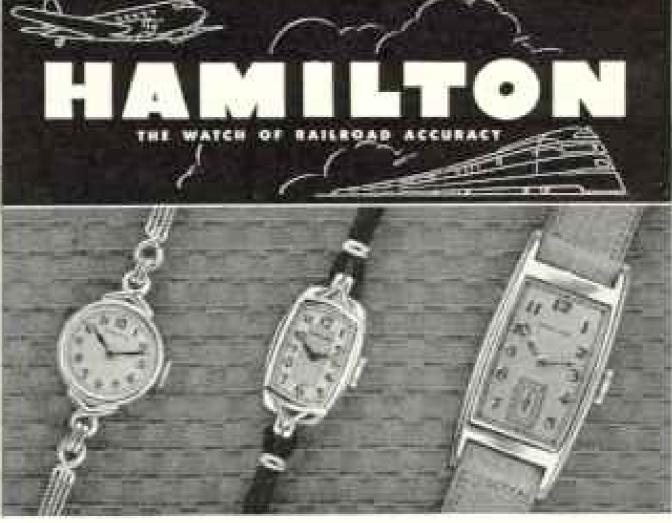
Accounts time at your service? Miss Mary Chambers, TWA horizon on the Kanzan City to Los Angeles run, gives a passenger securate time from her Hamilton standard for time aloft on "the Limbergh Line" planes.

Smart New Hamiltons, Left to Right

MYRNA. 17 jewels. 14K gold filled, white or natural yellow. Embosoot unmeral dist. With 14K gold filled close bravelet (shows), \$52.50, 36k sund, \$47,90.

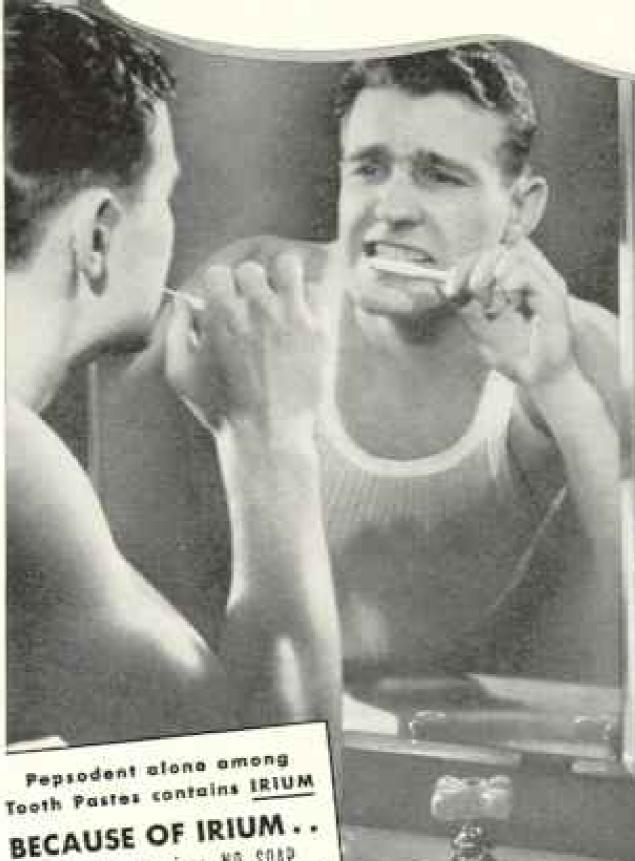
MURIEL. Popular new Hamilton. 17 jewela. 10K. guld filled, white or natural yellow. With gold filled brauelist, \$42.50. With allk cord (as illustrated), \$40.

CLARK, 27 jewels. 14K gold filled, named yellow unly, Applied gold numeral dist (as shown), \$52.50, Also comes with inloid seamed numeral dist, \$56,



LISTEN, MR. Scrub-Hard.

Why waste that high-powered brushing? Your teeth won't really sparkle unless you use the right tooth paste, too!



Pepsadent requires NO SOAP contains NO GRIT. NO PUMICE -Safe!

BECAUSE OF IRIUM ...

Pepsodent gently floats film away - instead of scraping it off.

- Thorough!

BECAUSE OF IRIUM ...

Pepsodent, with massage, stimulates gums and promotes tree-flowing salwa. -Refreshing!

Change to PEPSODENT TOOTH PASTE IT ALONE CONTAINS IRIUM Change to

PEPSODENT TOOTH PASTE

containing IRIUM

Gently removes film . . . wins flashing new luster . . . makes daily brushing extra effective!

Are you one of the Disappointed Scrub-Hards who brush faithfully day after day - yet still have dingy, film-stained teeth? . . . Then here's wour for you. Now proper brushing gets results-in teeth that sparkle with natural brilliance!

> New Pepsodent ingredient ends анарроинствия

IRITM-the remarkable new ingredient contained only in Pepsodent-steps up cleansing efficiency and provides smooth marking action instead of hard abrasion. TRIUM makes Pepsodenta wonderful tooth paste. One that tesponds instantly to your brush - penetrates between teeth -speedily loosens dingy film and floats it away like magic.

It's an amazing advance in tooth bygiene! You clean your teeth quicker, easier, Your brushing is weeful. Your teeth quickly win that glowing luster

that everyone nother.

If you would have beautiful teeth, remember that proper brushing is only half the formula. The other half is Pepsodent Tooth Paste containing taitm. Try it. The days of Scrub-Hard Disappointment will be over!

Pepsodent

All Pepsodent now on sale contains tuttor.

SHE'S THIRD IN FAMILY TO PICK PLYMOUTH AS MOST RELIABLE LOW-PRICED CAR

The Car that Best - Miss C. Eleanor Hinkley has driven 31,025 miles...spent only about \$20... gets 20 to 23 miles per gallon of gas

New 1937 Plymouth has still greater reliability and over-all economy

TAST SUMMER Eleanor Hinkley drove over 7,000 miles in her Plymouth... through mountains, deserts, sand-storms. In all, she's driven 31,025 miles...and her car has never been touched for repairs...is still on its original tires.

Plymouth stands up! And new features make it more luxurious. Scientific sound-proofing. New airplane-type shockabsorbers, rubber body mountings and Floating Power engine mountings. Allsteel body, 100% hydraulic brakes. And owners report 18 to 24 miles per gallon!

Compare "All Three" ... and compare resale values. You'll want Plymouththe car that stands up best. PLYMOUTH DIVISION OF CHRYSLER CORPORATION. Detroit, Michigan.



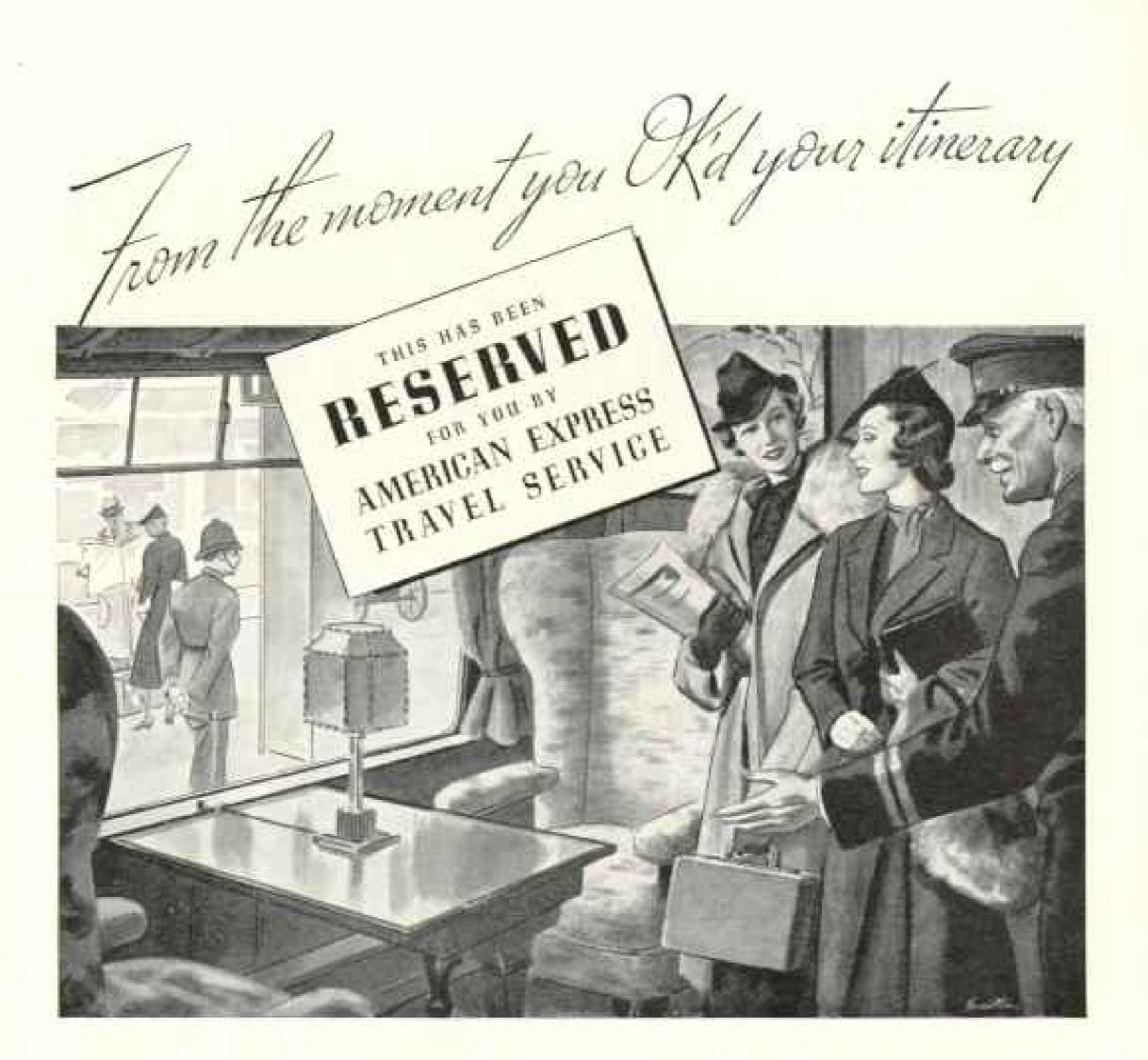


BEAUTIFUL 1937 Plymouth De Luxe 4-Door Touring Sedan, with spacious built-in trunk.

PRICED WITH THE LOWEST

You'LL FIND the big, 1937 Plymouth is priced with the lowest and offers very easy payment terms. The Commercial Credit Company has made availablethrough Chrysler, De Soto and Dodge dealers-terms as low as \$25 a month.

PLYMOUTH BUILDS GREAT CARS



No last minute inferior accommodations . . . no shopping for hotel rooms . . . no haphazard sight-seeing . . . because the world-wide American Express Travel Service, with its high prestige among leading hotels and transportation companies, has made arrangements for you in advance . . . American Express Travel Service offers you the skilled, unbiased advice of experienced men who transform your travel wishes into facts . . . relieving you of bothersome details ... leaving you free for effortless journeying.

Whether you go "on your own" or escorted . . . to the widespread continents of the earth or
on a cruise, you will find reservations made in advance, for
transportation and hotels. Interpreters will assist you at principal frontiers, piers and depots,

And American Express Travelers Cheques supply you with means for safe, reliable funds.

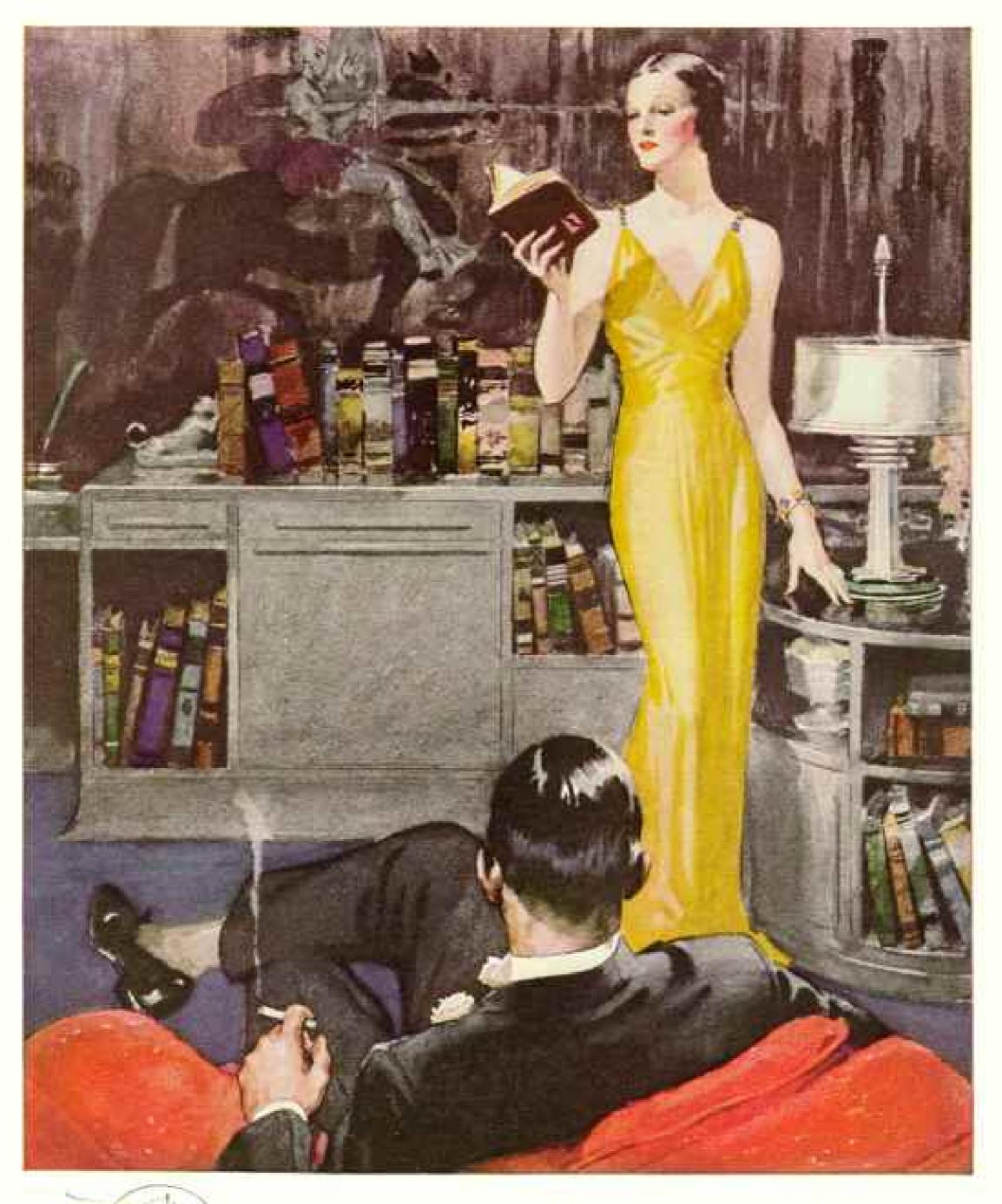
A visit, telephone call or letter will place your future travel plans in the experienced hands of the American Express World-Wide Travel Service.

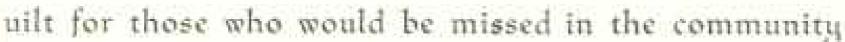
Offices in Atlanta, Baltimore, Boston, Buttalo, Chicago, Cincinnati, Cleveland, Dullax, Denver, Detroit, Kannas City, Los Angeles, Miami, Milwaukee, Minneapolis, Montreal, Newark, New Orleans, New York, Philadelphia, Pimburgh, Porsland, St. Louis, Salt Lake City, San Francisco, Seartle, Toronto and Washington and in principal cities throughout the world.

Ask your own Travel Agent for American Expens Travel Service

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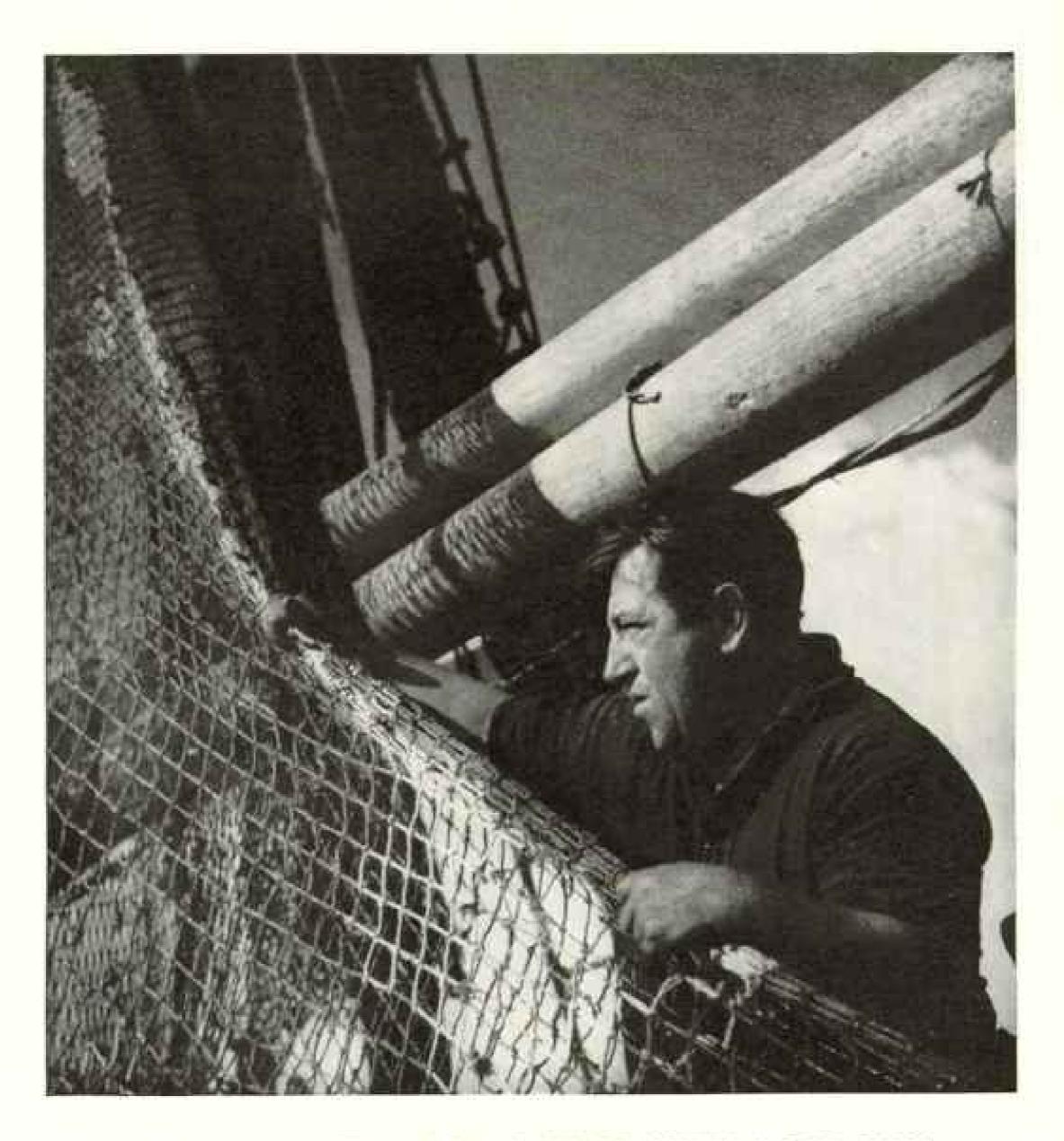
AMERICAN EXPRESS TRAVELERS CHEQUES ALWAYS PROTECT YOUR FUNDS





To provide the utmost in safety General has developed the Dual 10 tire. The unusual tread design of flexible ribbons of rubber makes it possible to stop a car quicker at 60 in the rain than ordinary tires stop at 50 in dry weather. One experience in preventing an accident that might have been fatal to you or others will make you quickly forget the somewhat higher cost of this remarkable tire. Property damage as well as human damage are further removed from reality when you ride on these tires. From the standpoint of year around safety everyone should have the protection the General Dual 10 provides.

The General Tire & Rubber Co., Akron, Ohio.



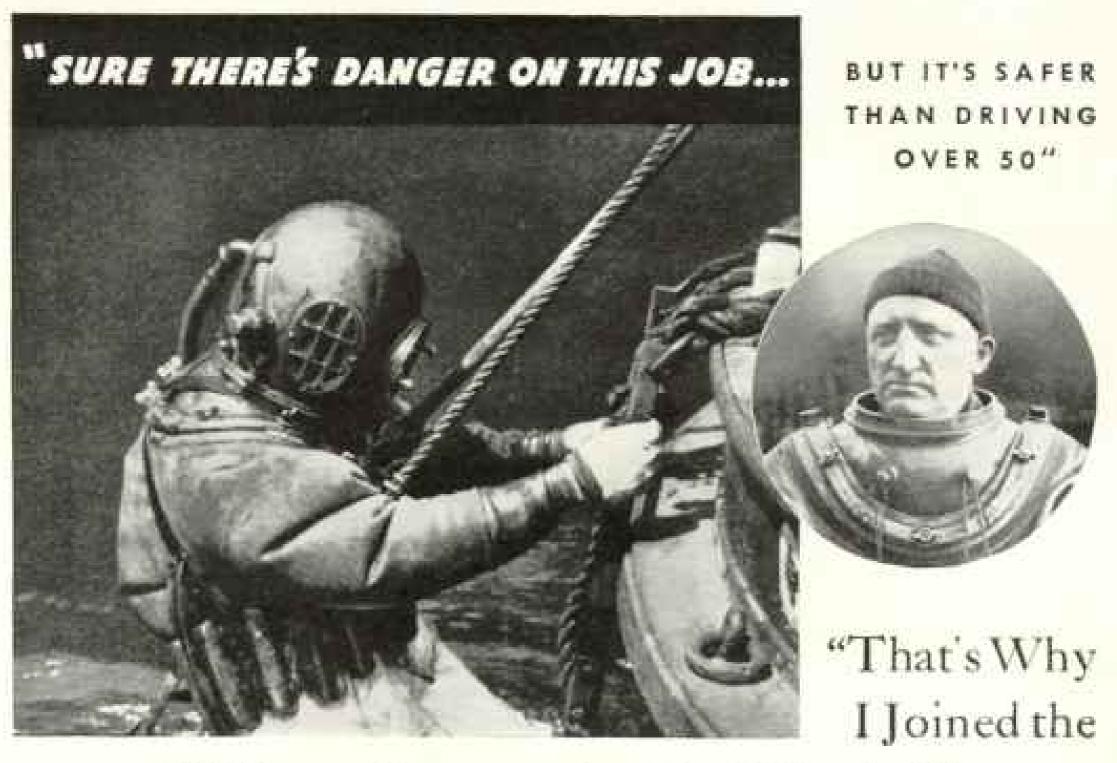
THIS PICTURE WAS MADE WITH AGFA FILM



You may lose rare photographic opportunities because of a film that fails to meet the requirements of unusual weather or lighting conditions.

Agfa Plenachrome Film's extra margin of quality insures best possible results under any conditions. That's why we are able to offer you every roll with the guarantee of "Pictures that satisfy or a new roll free." Made by Agfa Ansco Corporation in Binghamton, New York.





'Not-Over-50' Club!"

"There's plenty of unseen danger down where I work. But I'm on the look-out for trouble every second," writes William Lehndorf, 10703 Avenue H, South Chicago, Ill. "Diving or driving I want to be ready for any unseen danger. That's why I joined the 'NOT-OVER-50' Club."

No wonder 67% of all automobile deaths occur on rural highways. People don't have time to think and act in an emergency when they're speeding. That's why you should join the "NOT-OVER-50" Club.

Send for your free membership and safety emblems, now,

Car Insurance At Cost

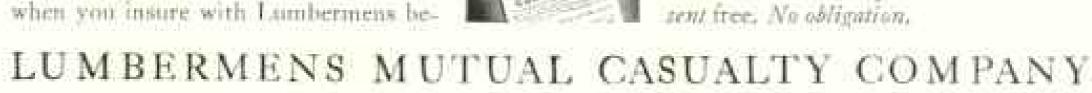
You buy your car insurance at cost when you insure with Lumbermens because Lumbermens has always paid large dividends in cash to policyholders every year.

The fact that Lumbermens insures only careful drivers who have fewer accidents is one reason why Lumbermens' net cost is so low. Efficient management is another.

You don't have to be insured in Lumbermens nor are you under any obligation when you join the "NOT-OVER 50" Club. So mail the coupon for your free emblems today.

Send for Your Free Insignia

The red arrow reminder for your speedometer . . . the Safety seal and the safe driving ereed can be obtained from your local Lumbermens representative or will be sent free, No obligation.



FOR SAFETY

Division of Kemper Insurance "Warld's Greatest Automobile Manual"

OFFICE: MUTUAL INSURANCE BUILDING, CHICAGO, U. S. A. HOME

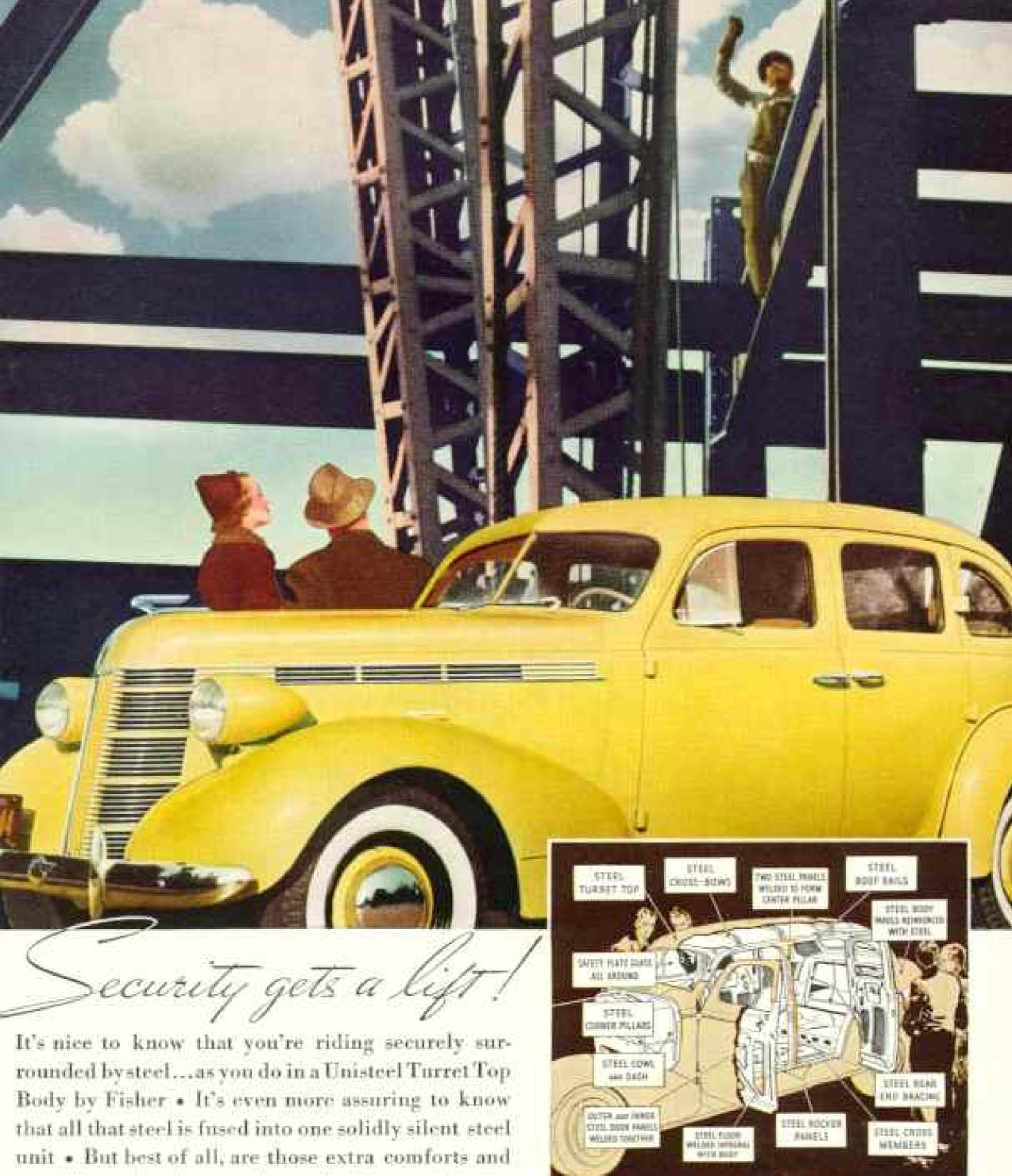
START SAVING LIVES
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"NOT-OVER-M" CLUB. 4736 Sheristan Road, Chicago, Illinois

scribed above. I understand that these insignia are free and that this places me under no obligation.

Also send me your booklet How Careful Driving May Pay You a Dollars and Cents Return.

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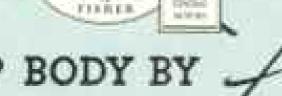


special luxuries that you always find in any Body by Fisher • Apparently, it made quite a difference . . .

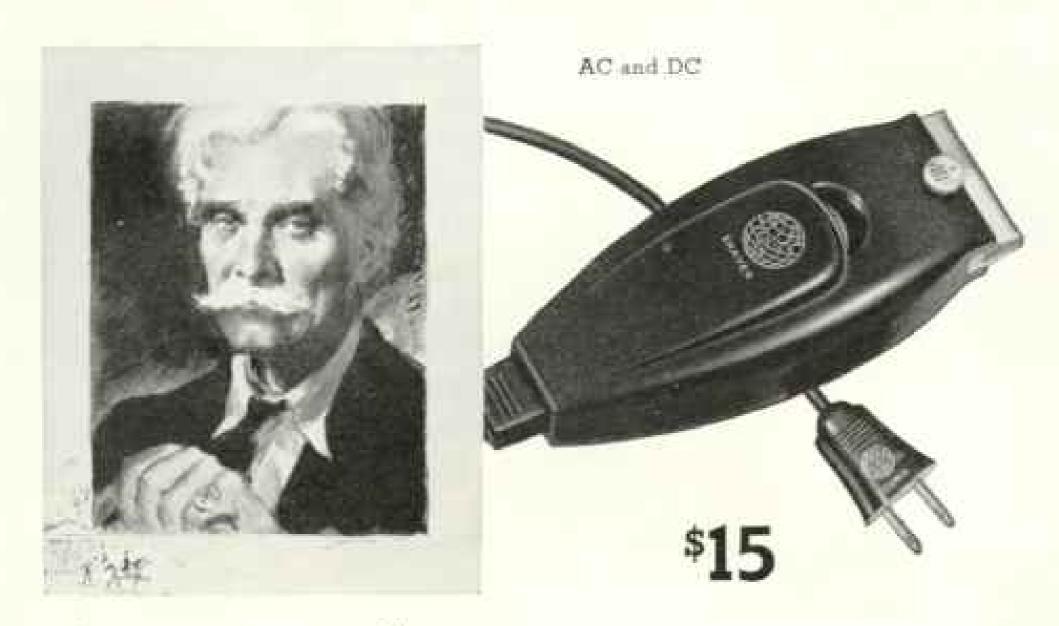
The inside story of Unisteel construction

glorifying the steel body this way . You find the Unisteel Body by Fisher is roomier. You notice that even heat, cold and noises have been soft-pedaled . These improvements mean a lot. And, of course, it means a lot, too, that only General Motors cars have Unisteel Turret Top Body by Fisher.

PICTURED ABOVE: "The most beautiful thing on wheels" -1937 Pantone with Unioned Body by Fisher



GENERAL MOTORS CARS ONLY CHEVROLET "En the mail papells makely



A gentleman from Virginia

He shaved 2000 times with a Schick

He has used a Schick Shaver for nearly five years—shaving every day and twice on Saturday and Sunday. He has shaved more than 2000 times and his Schick works as well today as the day he bought it. How could shaving cost less than this?

But cost is nothing compared to the sheer joy of painless, quick and close shaves with the Schick.

Our Virginia gentleman solemnly told us that he would part with any other personal possession even his ring with the family crest—rather than give up his Schick if he could not buy another.

Why deny yourself this pleasure another single day?

Imagine the comfort of shaving even on the coldest morning with a Schick. No water and soap—no lather to fuss with. No blades to cut or scrape—nothing but a gentle rubbing with the flat shearing plate (which does not move mechanically). The two-way action of the Schick quickly and easily shears every hair below the level of the tiny mounds of the skin—and you cannot possibly out yourself.

Schick shaves cost less

Look beyond the price of the Schick to this fact. Your shaving will cost less over a period of time. And every day you live and shave you will enjoy the greatest single comfort a man may have in his personal life.

Do not postpone your decision! Go to one of our dealers and ask him to show you the Schick Shaver. Be sure he is an authorized dealer through whom we guarantee and service Schick Shavers.

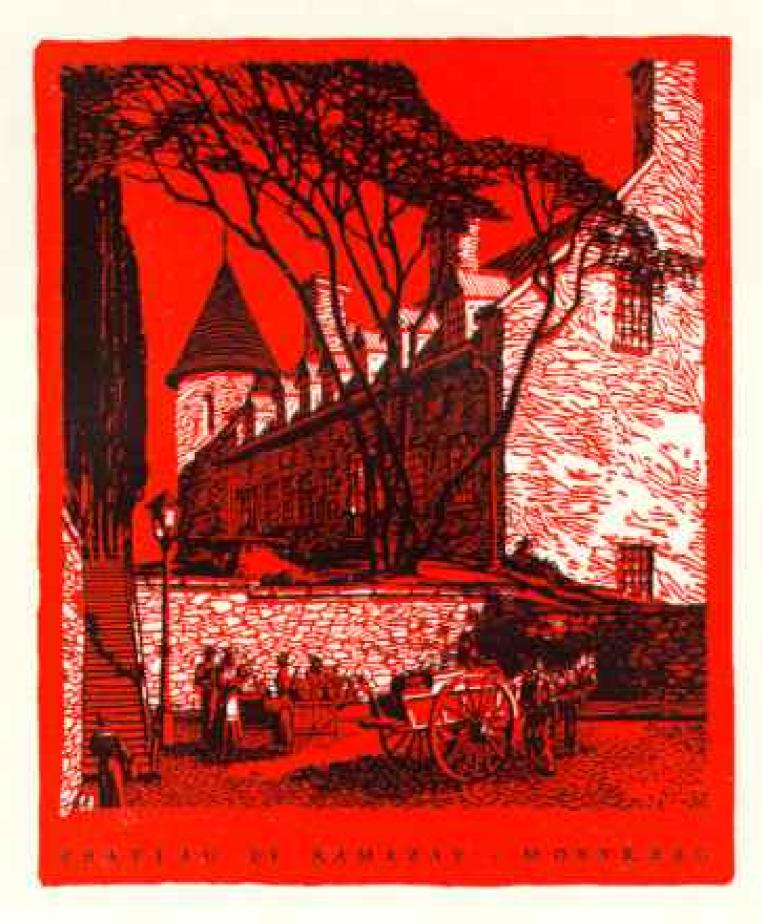
SCHRON, DRY SHAVER, INC., STAMFORD, CONN., Women Disconsin Edies, for, San Francisco, In Canada, Mency Birts & Sons, Ltd., and Jetter Scaling stores. (Canadian price, \$16.00.)





Stores everywhere feature Alexander Smith Broadloom Carpets. Ask for them by name. For free TRU-TONE Carpet Book, write Alexander Smith Division, W. & J. Sloane Wholesale, 295 Fifth Avenue, New York, N. Y.

CHATEAU DE RAMEZAY 1705



HERE, in 1776, were received Benjamin Franklin, Samuel Chase of Maryland, and Charles Carroll of Carrollton, representatives of the Continental Congress.

Franklin founded here one of the oldest newspapers on this continent, "The Gazette" of Montreal, published in French at the time, and to-day recognized as one of Canada's most influential newspapers.

Home of the early French and English Governors, it was built in 1705 by Claude de Ramezay, Chevalier de St. Louis, then Governor of Montreal. It stands to-day facing the City Hall, and overlooking colourful Marché Bonsecours. Now a Museum and home of the Antiquarian Society, it is open to the thoughtful visitor who wishes to stroll through salons and halls that reverberated to the gaiety of Seigneurs and Grandes Dames of the Louis XIV period.

The Province of Quebec is in truth the cradle of this continent's history. Plan to visit during this coming Summer the home or birthplace of most of the early trail blazers — Cadillac, Bienville, Iberville, LaSalle, Père Marquette, Radisson, Nicolet, du Lhut, Joliet, and a host of others—adventurers and explorers who built forts and planted the cross and the fleur de lys from Hudson's Bay to the Gulf of Mexico.

La PROVINCE de QUEBEC

Office du Tourisme Québec, Canada



"SHE IS GROWING EVERY YEAR"

and so are the savings for her future invested in

UNITED STATES SAVINGS BONDS

The realization of hopes for a child's future often depends on a definite savings plan. For this reason many parents are buying United States Savings Bonds on a systematic basis.

Government bond safety is available to purchasers of Savings Bonds for as little as \$18.75. The table below shows how investment under the Regular Purchase Plan will provide a basis for future security. Savings Bonds are free from price fluctuation and may be redeemed in cash at any time after 60 days from their issue dates.

During the first year the redemption value equals the purchase price. At the end of the first year and each six months thereafter, the redemption values increase in amounts as printed on the face of the bond.

ITED STATES SAV

DIRECT OBLIGATIONS OF THE UNITED STATES GOVERNMENT

HOW TO SAVE SYSTEMATICALLY

To provide funds for the future, select the program best suited to your needs, then buy a bond each month.

If you invest each month for 120 consecutive months any specific amount shows below

Beginning in 10 years you will receive each month for 10 years therenifter

\$18.75	$\mathcal{T}_{i}^{(i)} = \mathcal{T}_{i}^{(i)}$	188		\$25.00
\$37.50		$ k\rangle N / k$	****	. \$50.00
\$75.00		• •		.\$100.00
\$93.75		:00:	* * * * *	. \$125.00
\$187.50				
\$375.00	o	160	NO. 1992	.\$500.00

-For Sale at Post Offices and Direct by Mail-TO ORDER BY MAIL

TREASURER OF THE UNITED STATES, N.O.A., Washington, D. C. Please send me without obligation your Regular Purchase Plan and forms for my consideration and optional use. Send my the following bonds for which I enclose check, draft, or money order. NUMBER

\$25 U. S. Savings Bands at \$18.75 \$ 1074111 \$50 U. S. Savings Bonds at \$37.50 \$ \$100 U.S. Savings Bonds at \$75.00 \$ 51000 U. S. Bavings Boads at \$750.00 \$ Total 5 Name Mrs. Register in the name of Street address and send to

Make all remittances payable to Treasurer of the United States.

State

See twice as much



GO ONE WAY - Cross Great Salt Lake on the famous Lucin Causeway. See the High Sierra on the OVERLAND ROUTE.



RETURN ANOTHER - See Carisbad Caverns
National Park and Southern Arizona on the
SUNSET or GOLDEN STATE ROUTE.



The most beautiful train in the West!

When you visit California, ride Southern Pacific's new million dollar streamlined Day-light between Los Angeles and San Francisco. See the magnificent coastal mountains. Speed along the Pacific Ocean's edge by daylight for more than a hundred miles. Color book describing the train upon request.

on your trip to California by following this simple plan:

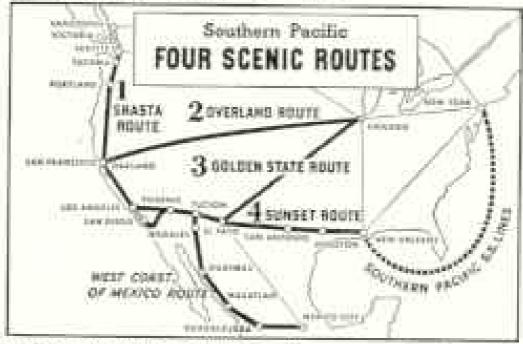
It isn't every day you go to California. So when you do, why not see as much of the West as possible? Why not add Southern Arizona to your trip, the wonderful Pacific Northwest and even New Orleans and the Old South?

You can do this on a Southern Pacific ticket. Simply go west on one of Southern Pacific's Four Seenic Routes and return on another one. That's all there is to it. You see a different part of the United States each way. You see twice as much of the West as you would if you went and returned on the same route. And from most eastern and mid-mestern points it doesn't cost you one cent extra rail fare!

The twelve fine trains on our Four Scenic Routes are all completely air-conditioned and noted for their western hospitality.

LOWEST FARES IN HISTORY! Southern Pacitic spring fares, now in effect, are the lowest ever offered at this season. For example, \$57.35 from Chicago to California and back in air-conditioned chair cars; \$68.80 in air-conditioned tourist sleeping cars (plus small berth charge); \$36 in air-conditioned standard Pullmans (berth extra), Low summer excursion fares start May 15.

TAKE YOUR CAR. Two people traveling on first class Southern Pacific tickets can take an automobile along for only 4¢ a mile.



FREE TRAVEL GUIDE. Plan your trip with our new, picture-filled booklet, How to See the Whole Pacific Coast. For your free copy, write O. P. Barrlett, Dept. NT-4, 310 So. Michigan Avenue, Chicago,

Southern Pacific

FOUR SCENIC ROUTES TO CALIFORNIA

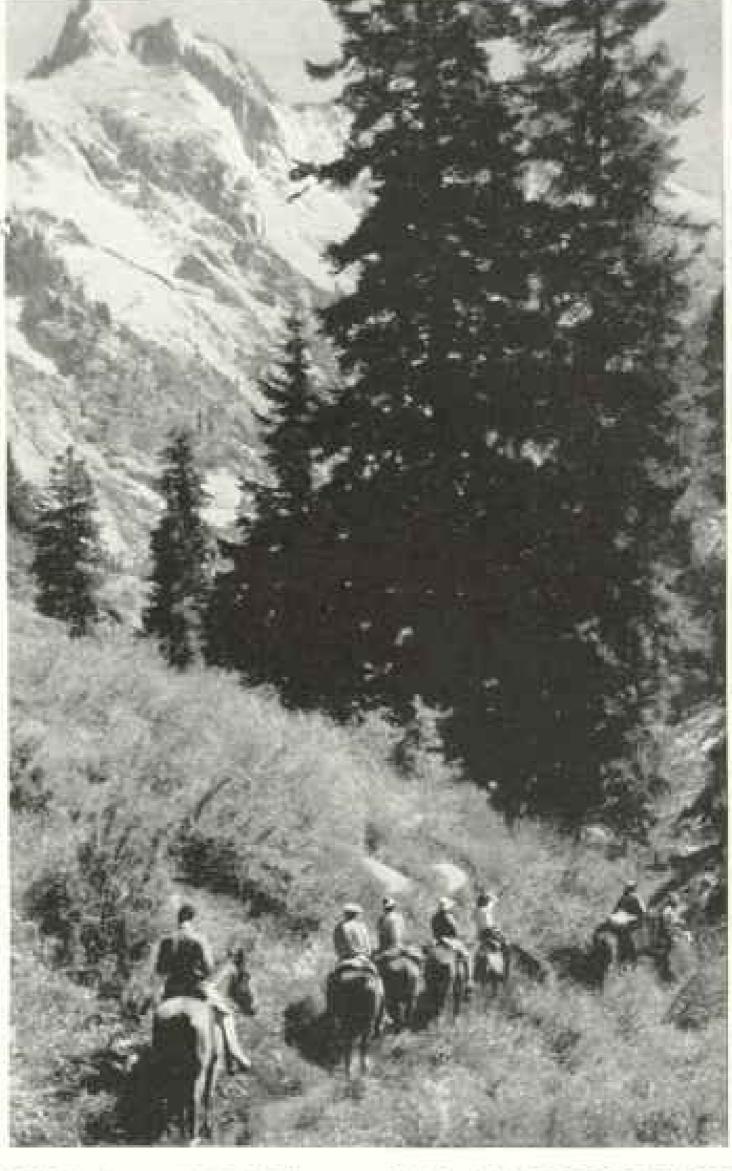
This may not be your idea of a Vacation

The tangy air of snowcapped beights... the scent
of sage and balsam... the tug of
a hungry trout... these things, to
some, spell a perfect vacation. Others prefer a tingling plunge into the
foaming surf, the lift of a wave
and snap of a sail, the racing speed
of a surf-board's glide, or lazy relaxation on the sand.

Fortunately, Nature has blessed Southern California with both mountains and sembore. And if neither fills all your vacation requirements, Los Angeles County and its neighbors offer you many other things this summer: Sportsgolf, tennis, polo, riding, hunting, auto races-your favorite, whatever it may be, in new invigorating settings, Rainless summer days and balmy all-year climate. Fascinating industries - citrus, oil, movie-making. Daytime and evening thrills in celebrity-filled Hollywood. Palms and orange groves, and ancient Spanish Missions, World-known resort cities like Los Angeles, Pasadena, Long Beach, Glendale, Beverly Hills, Santa Monica, Pomona.

All these and more are only overnight, even from New York, by plane, 2½ to 3 days by train, 5 to 7 by auto or bus, 2 weeks by ship via Panama. And costs here average 15% to 32% under those of 20 leading U. S. resorts.





FREE: Automatic Trip Planner

This 80-page Official Guide Book
—widely acclaimed by travel experts—plans your trip for you from
start to finish; what to see and do,
how to get here, time required,
itemized cost schedules, plus over
100 photographs, maps, etc...authentic facts not available elsewhere. Coupon brings it FREE;
also New California Picture Map.

Come to California for a glorious vacation. Advise anyone not to come seeking employment, lest be be disappointed; but for tourists, the attractions are unlimited.

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SOUTHERN CALIFORNIA

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All. Year Club of Southern California, Div. 1-4, 629 So. Hill St., Los Angeles, Calif.

Send me feer book with complete details (inclinding costs) of a Southern California variation. Also send free routing by part, pril, plane, bor, swamship, Also send free booklets about counties absolute Barbara, Miverside, Orange, San Diege, Venture, San Bernardino, Karn, Imperial.

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ALL-YEAR CLUB OF BOUTHERN CALIFORNIA

1937 SUPER-DUTY FRIGIDAIRE METER-MISER

Cuts Current Cost Amazingly!

Proves THRILLING ADVANCE IN ALL 5 BASIC SERVICES FOR COMPLETE HOME REFRIGERATION



Ends "Cube-Struggle" and "Ice Famine!" At last, the refrigerator that instantly releases all ice trays-and all cubes from every truy, with the New INSTANT CUBE-RELEASE! Also freezes more pounds of ice-faster . . . stores 100% more ice-cubes ready for use! Most complete ICE SERVICE ever known.



New 9-Way Adjustable Interior! Goodbye to old-fushioned crowding and dishjuggling. Now you get maximum shelf space up in front. And Full-Width Sliding Shelves, Cold-Storage Tray, new Super-Dury Hydrators, ALL adjust like magic to suit any size or shape of food! Most consplote STORAGE SERVICE ever known.



Keeps Food Safer, Fresher, Longer! Safery-Zone Cold in food compartmentproved by new Food-Safety Indicator with Dial on the Door, always in sight. Plus MOIST Cold for vegetables . . . EXTRA Cold for meats ... FREEZING Cold for ice cream and frozen desserts. Most complete PROTECTION SERVICE ever known,

THRILLING _ this thing Frigidaire has done for 1937! Thrilling for the new completeness it brings in All 5 Basic Refrigeration Services every woman wants and needs in her home! . . . Now you can see PROOF that Frigidaire is the most complete ice-provider, foodstorer and food-preserver ever known.

This year, make sure the refrigerator you buy performs All 5 Basic Services vital for complete home refrigeration. Visit the thrilling PROOF-DEMONSTRA-TION in your nearest Authorized Frigidaire Dealer's Store. It shows you what to look for in 1937 - how to buy. And remember - the new "Super-Duty" Frigidaire with the Meter-Miser costs no more than an ordinary refrigerator!

FRIGIDAIRE DIVISION General Motors Sales Corporation Dayton, Ohio



New Instant Cube-Release in Every Ice Tray See it in action!

Only Frigidaire has it! Instantly releases icecubes from tray, two or a dozen, as you need them. Yields 20% more ice by ending funcet meltage waste. See PROOF of its quick, easy action at your Frigidaire dealer's.



PROOF 4 GREATER DEPEND-ABILITY

Five-Year Protection Plan, backed by General Motors, on Frigidaire's sealed-in mechanical unit. This, together with Frigidaire's Scaled Steel Cabinet, Special Sealed Insulation and Lifetime Porcelsin or Durable Dulux exterior, all adds up to the most complete DEPEND-ABILITY ever known.



See its lower opersting cost braved by an electric merer before you buy! The Motor-Miser does Super-Dury at amuzing saving because it's the sim-

plest refrigerating machinism over built . . . Only 5 moving parts, including the motor ... permanently oiled, completely scaled against moisture and dirt. Frigidaire with the Meter-Miser saves enough on food and operating cost to pay for itself, and pay you a profit besides?



"Number One Boy"

WHEREVER YOU MEET IT!

HERE'S a situation worth men-tion-here the East has met the West and found it very much to its liking!

In ancient China, where a true and faithful servant is both appreciated and respected, Buick plays the role of Number One Boy for transportation in many an honorable household.

In this great car Occidental dash and vigor mingle with Oriental suavity to serve the modern needs of China's moderns as they should

be served.

In fact, wherever you meet Buick, in China, South Africa, Europe, the Americas, it's Number One Boy of its field - a car that earns top place by ability and character.

BUICK SERVES THESE LEADERS OF MODERN CHINA

The President of the National Govermotent

The President of the Executive Yuan Ministers of the Novy and the Army

The Former President at the Executive

The Ministers of Finance, of Foreign Affnire and of Railways

The Vice-president, the Chief of Staff and Two Members of the Military

The Commander of National Defense

The Governor of Fukien Province

The Fresidents of the Ministry of Examination Year, the Cansory



"It's Buick again!" YOUR MONEY GOES FARTHER IN A GENERAL MOTORS CAR

Where CERTAINTY is Priceless



Near to your heart is the desire to do lasting honor to someone who has gone before. What you may lack in familiarity with the little-known subject of choosing a memorial need never cause you concern.



Rock of Ages Memorials are hallmarked by an unobtrusive graven seal which affirms that the beautiful blue-gray granite finds its origin in the famed Rock of Ages deposit at Barre, Vermont; and that all details of design and finish have been executed by master craftsmen, employing patented processes in Rock of Ages plants. A memorial so marked carries with it the maker's all-time guarantee, which, in turn, is bonded by the National Surety Corp. Regrets are averted by demanding that your memorial bear the Rock of Ages seal, offered only by anthorized dealers.

FREE "HOW TO CHOOSE" BOOK

Vital memorial factors you will wish to review are clearly explained in our new book, "How to Choose a Memorial." Types, symbols, harmony with cemetery environment and other welcome information are all covered. Write for your copy.







For your protection.

IIVERY ROCK OF AGES MEMORIAL BEARS THIS SKAL etched in the stone

BOCK OF AGES CORPORATION, DEPT. D-1, BARRE, VERMONT I would be glad to see a copy of your free book, "Most in Charte of Memorial," with illustrated guidance on designs, symbols, etc.

NAME

ADDRESS.



new kingdom of music for you who

play the piano. A concert organ for the home

YOU play the piano even a little, the Hammond Organ opens for you a veridenew wonderland of music. For on the mmond the touch of your finger sumns forth not just a single tone color, but infinite variety of lovely organ voices. At the keyboard of this remarkable inament, you give your favorite melodies w, exquisite depth and richness. The splest tunes are inspiring to you—thrill-

to those who listen.
All the varied voices
the organ—strings,
ds, diapasons—are
your command. You
ft from one to aner to suit your mood.
and this new kingdom

of organ music is now for the first time within the reach of families of average income. Producing the full tone range of the concert organ, the Hammond costs no more than a fine piano, fits into any living room.

See and hear the Hammond Organ at the showrooms of any of our dealers—each one the leading musical merchant of his community. You will find an organist glad to play for you. He will demonstrate to

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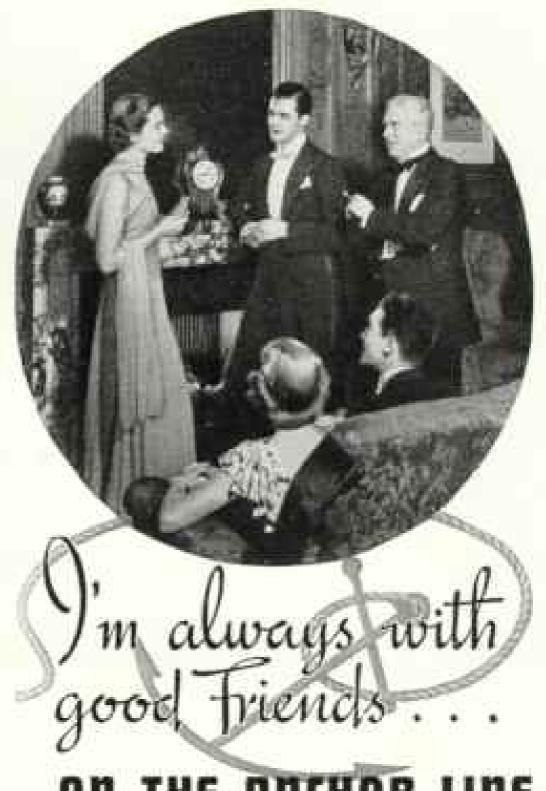
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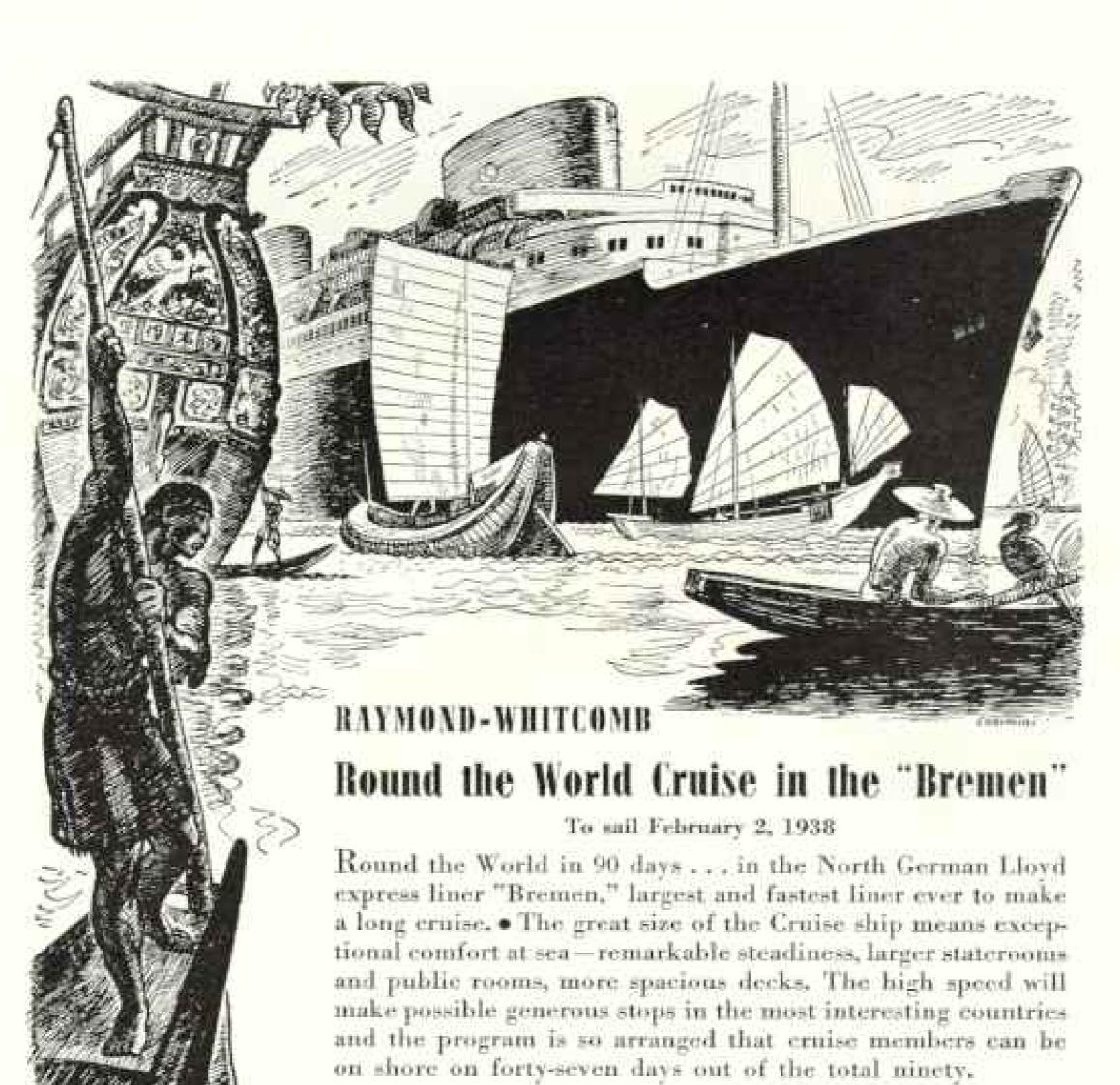
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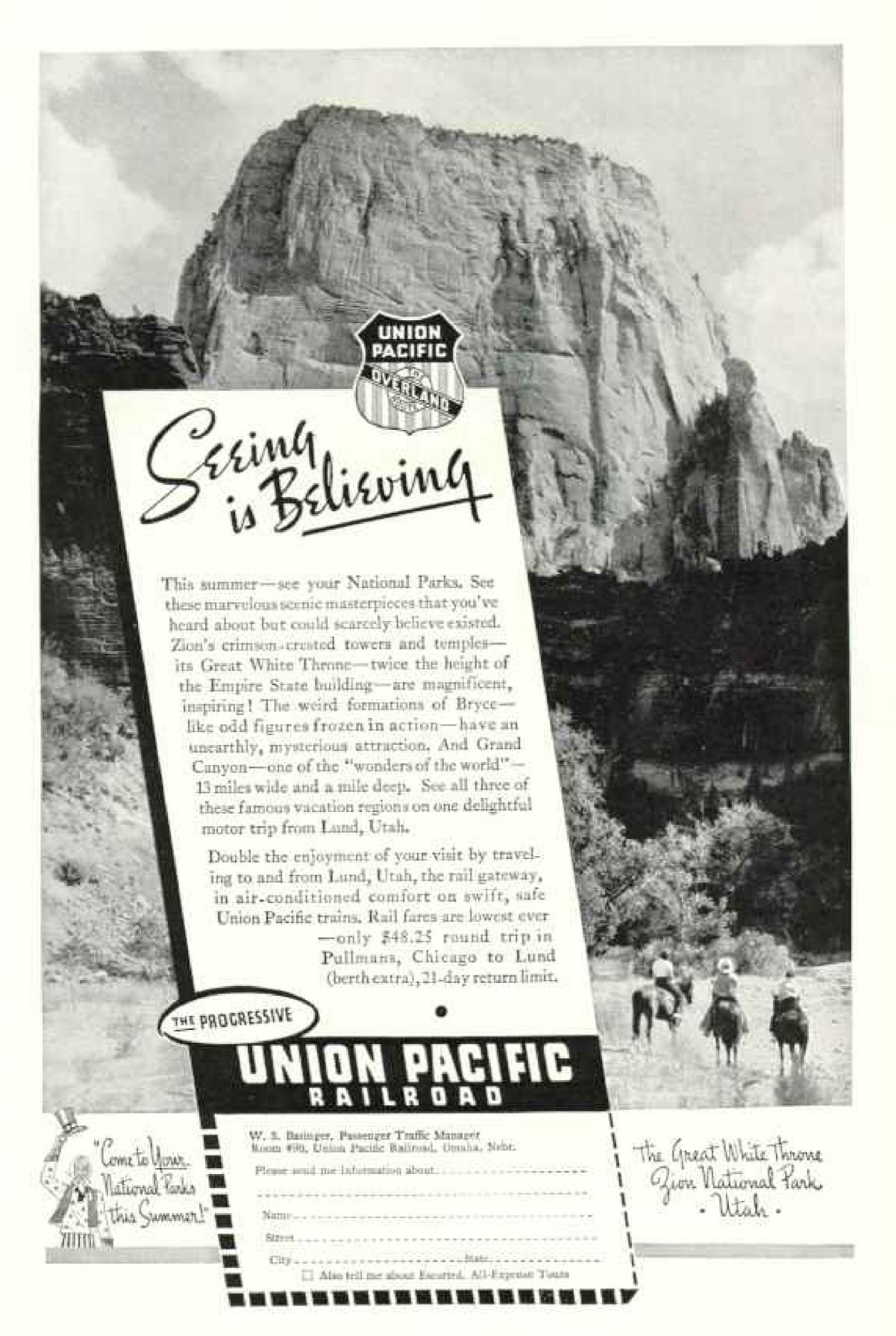
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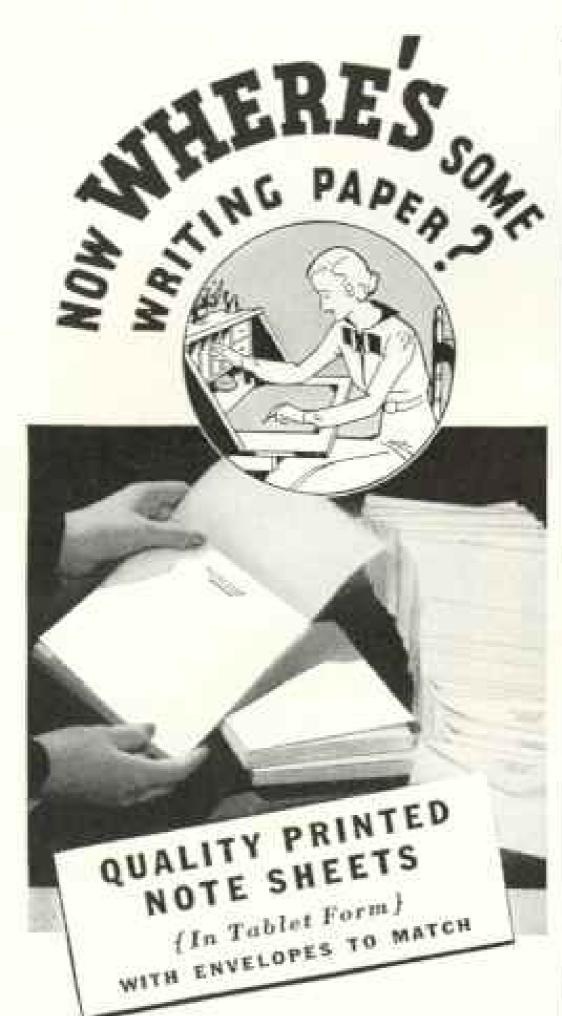
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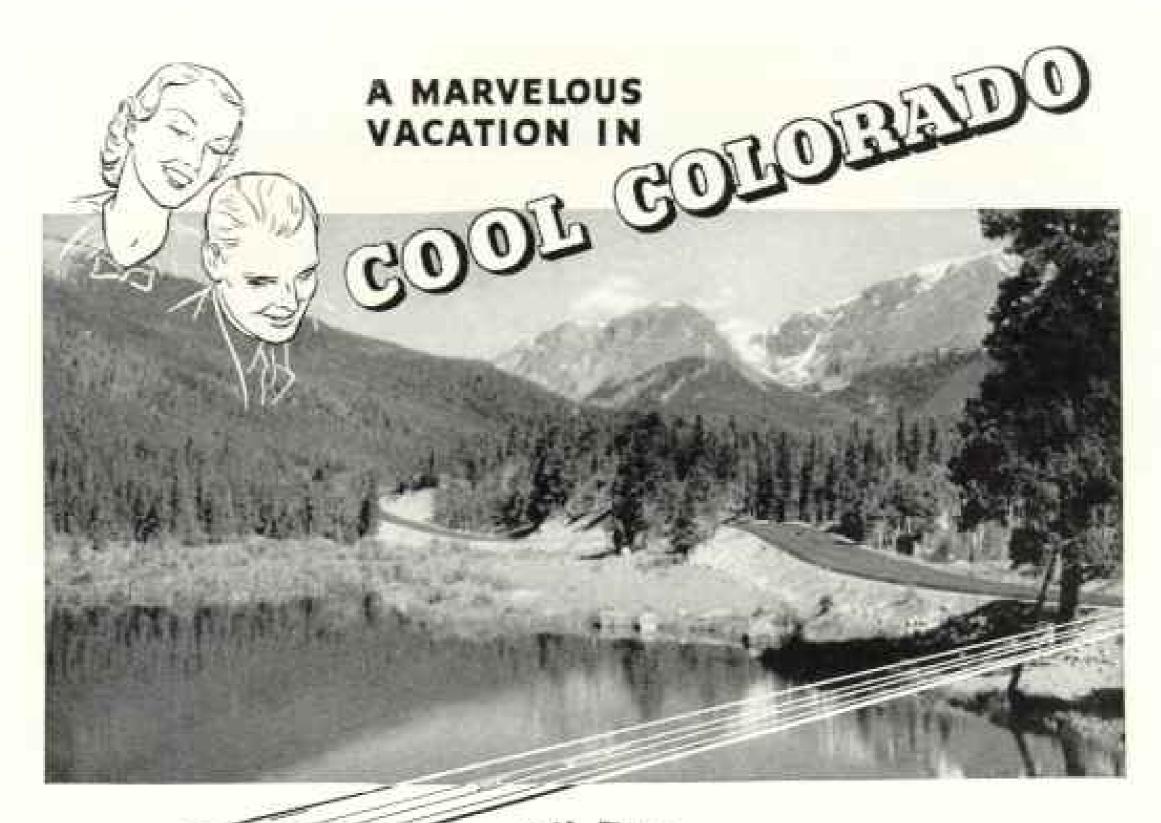


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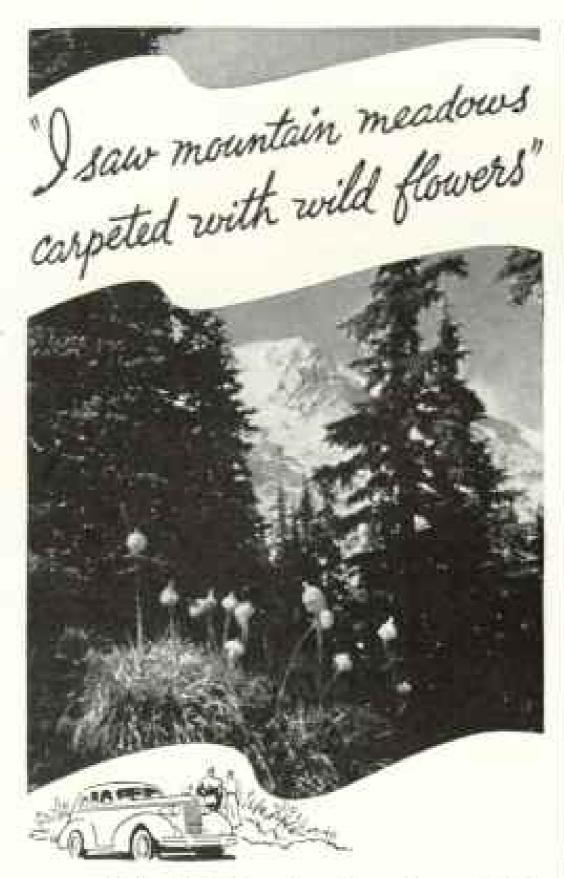


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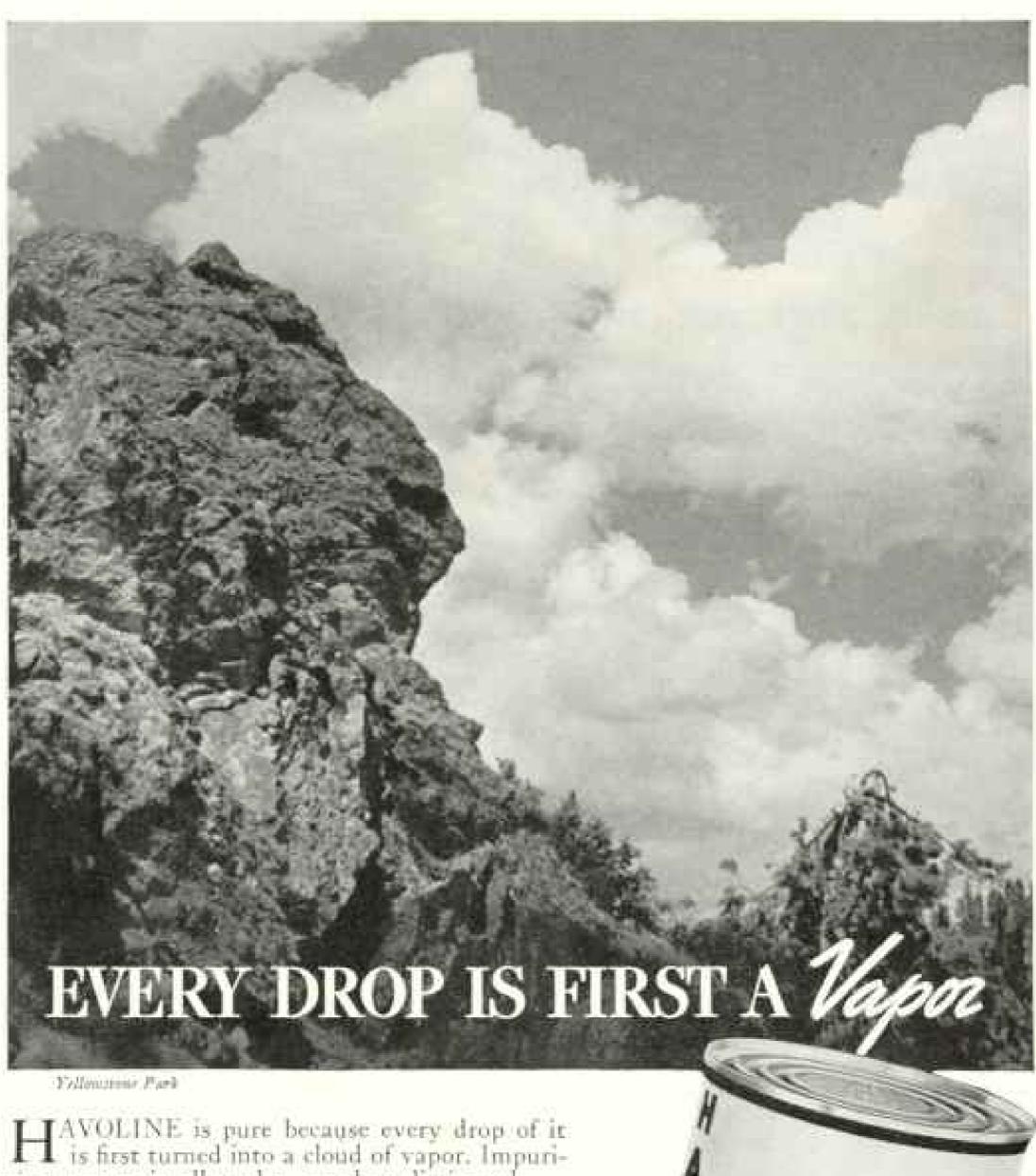
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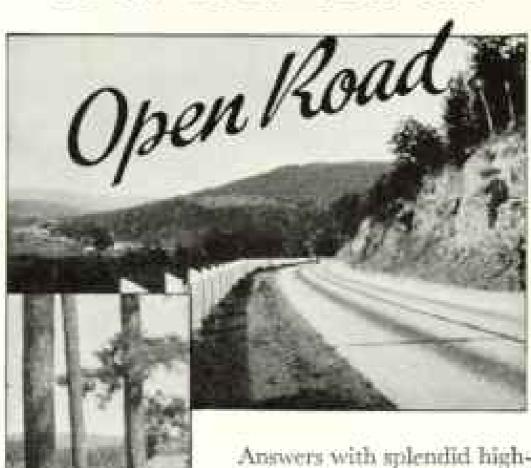
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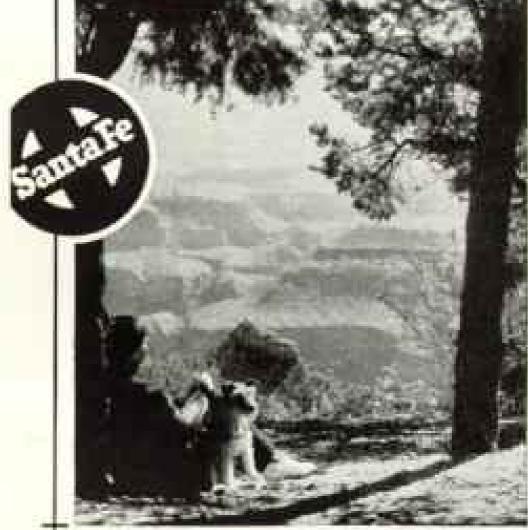
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Grand Canyon

NATIONAL PARK this summer

When the Santa Fe built to the Grand Canyon 35 years ago—and it is still the only road entering the Park—this incredible work of Nature was known only to the adventurous few.

- It is different now. Through the years 2,000,000 persons have visited the Canyon's South Rim, spread its glory to the ends of the earth, made it the West's most famous stopover on transcontinental journeys.
- Via Santa Fe, this summer, you will find daily through air-conditioned Pullmans, direct to the rim; last year's record low fares; all-expense Canyon tours in great variety. There are picturesque El Tovar Hotel, and new Bright Angel Lodge and Cabins, beautiful and moderate-priced. Walks, bridle paths, rim drives—all are at their best. There is another spectacular inner-Canyon saddle trail, a big swimming pool at Phantom Ranch, in the painted depths.

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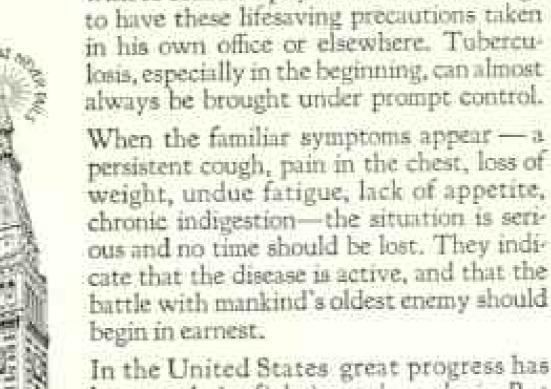


In many of the foremost schools and colleges, students are given tuberculin tests and also X-ray examinations, when they seem advisable. The tuberculin test shows whether or not a boy or girl has picked up germs of tuberculosis. If the test shows that germs are present, X-ray pictures help to reveal whether or not the germs have done any damage.

In the schools where it is convenient to do so, mothers are invited to be present at the time the test is made. It is important that all parents should more fully understand how the early discovery of tuberculosis and proper treatment may prevent future danger.

The tuberculin test is in no sense a preventive, or a cure. When followed by X-ray pictures that show trouble is brewing, it points the way to modern, scientific treatment of the patient.

In case your child does not attend a school which provides the tuberculin test and X-ray examinations, you will probably



In the United States great progress has been made in fighting tuberculosis. But there are still five hundred thousand persons sick with this disease. Efforts in fighting this stubborn enemy should be increased until it has disappeared like other life destroying plagues which have been conquered by modern science.

Send for the Metropolitan's free booklet "Tuberculosis." Address Booklet Department 437 N.



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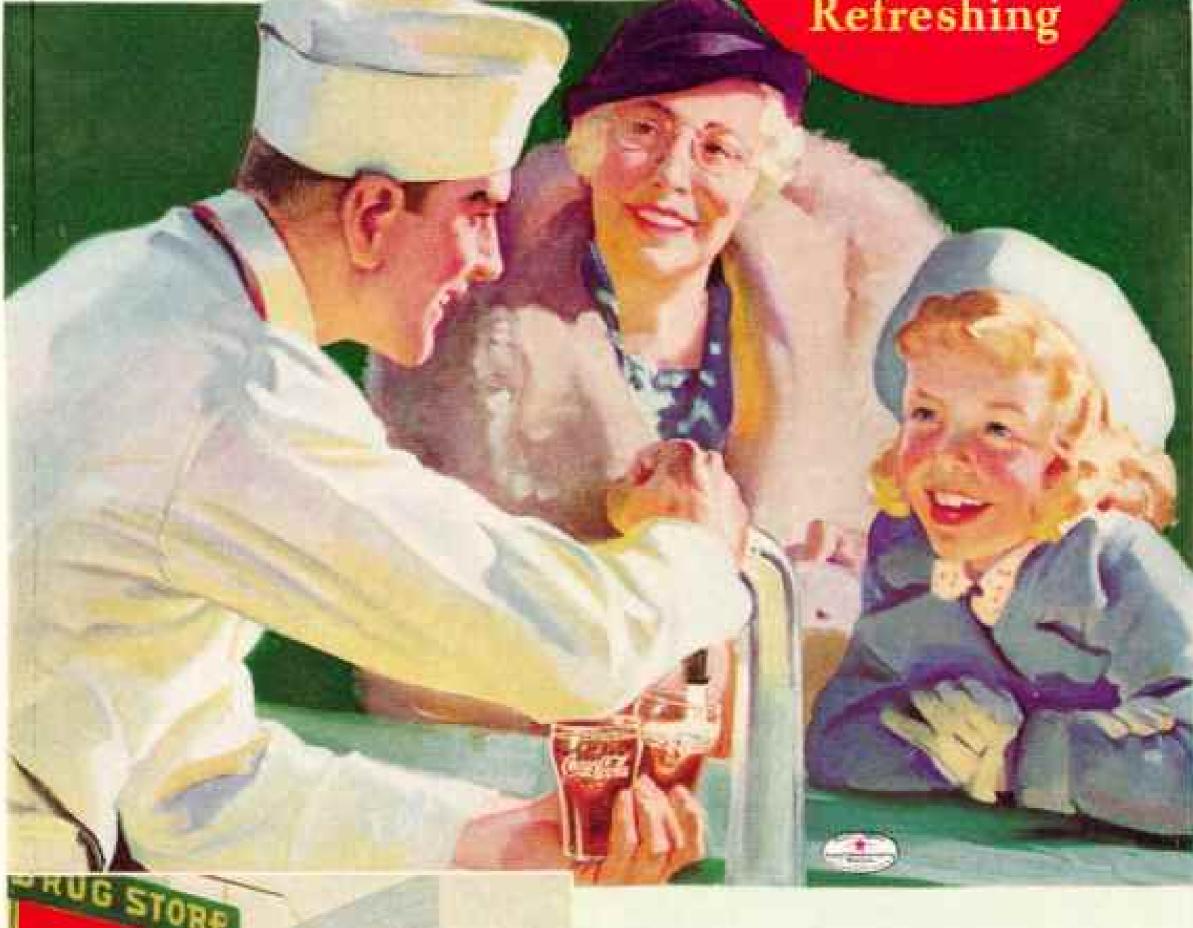
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Constable Stilling, of Philadelphia, leaped into his car.
There was no time to spare.
'Faster! Faster!' Then—without warning—BANG! A blow-out!
The car leaped out of control like a wildcat—swerved to the left—just missed crashing headlong into a telephone pole.

But Lady Luck smiled that night—and the extent of Constable Stilling's injury was a wrenched shoulder. Some miracle had saved him. As he, himself, says: "I feel now that I am living on 'borrowed time." There was every reason why I should have been among the missing."

Many "Blind" To Blow-out Dangers

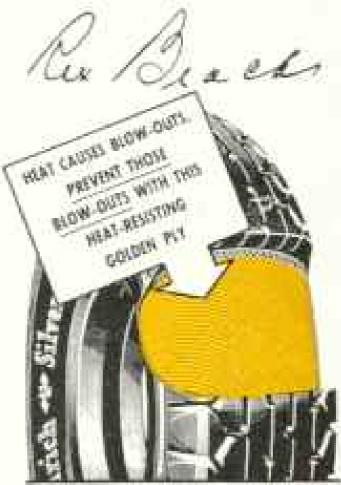
Just stop to consider what happens to your tires when you're skimming over the pavements at 50, 60 miles an hour. Naturally, the heat generated is terrific, and you're totally unaware of it because the trouble begins inside the tire. A tiny inwisible blister may form between the rubber and the

fabric. This blister keeps getting bigger and BIGGER until BANG! And then it may be too late.

It seems to me that, as far as safer tires are concerned, the greatest single contribution has been from Goodrich engineers. They have developed a real blow-out protection called the Golden Ply.

It is a layer of special rubber and full-floating cords, scientifically treated to resist internal tire heat. You can easily see what this means. Blisters don't get a chance to form between the rubber and fabric inside your tires . . . and that means blow-outs due to this heat don't get started.

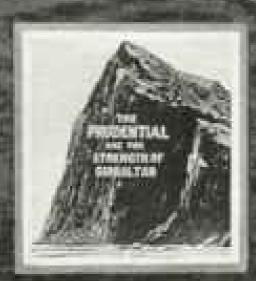
You can be sure that Constable Stilling doesn't take any chances with his tires these days. He's ready for any emergency and so are his Goodrich Silvertown Tires. Here is another enrollment in the ranks of safe drivers who feel that tires which protect people from the dangers of high-speed blow-outs are a sound investment—a vital form of life insurance. Remember, you can buy these life-saving Silvertowns at Goodrich Silvertown Stores and Goodrich dealers everywhere.



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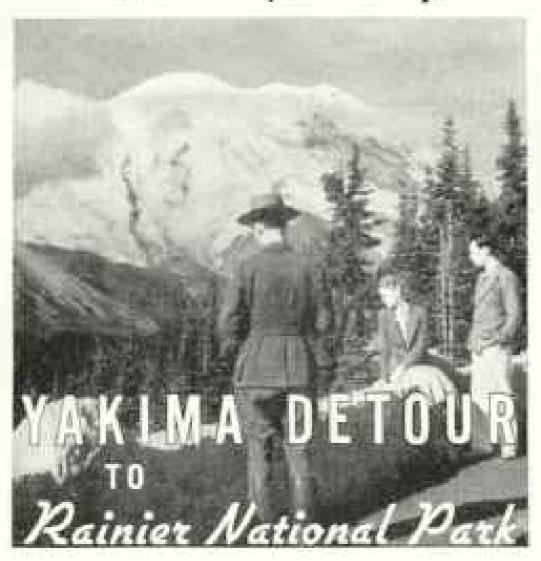


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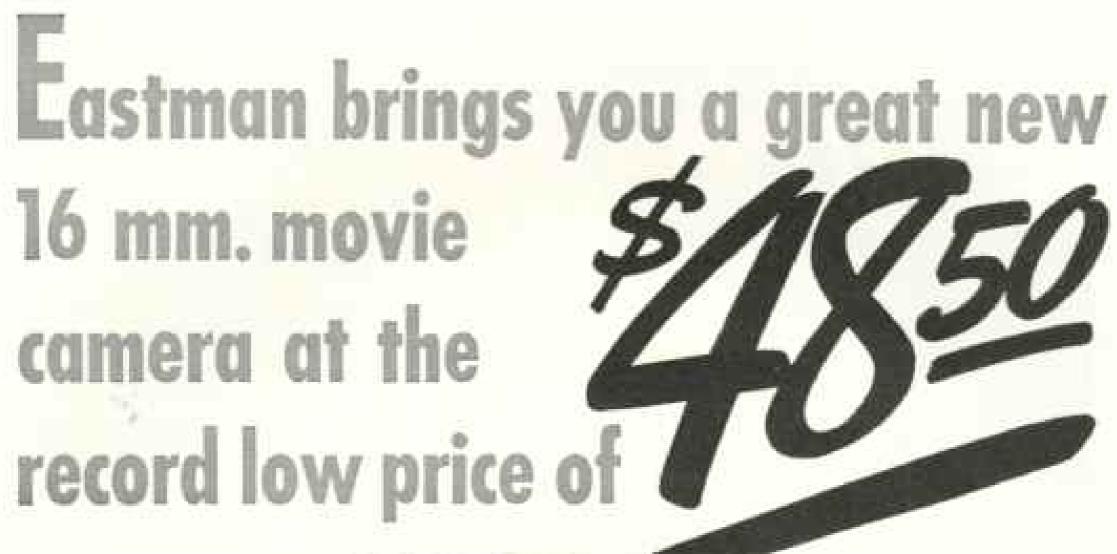


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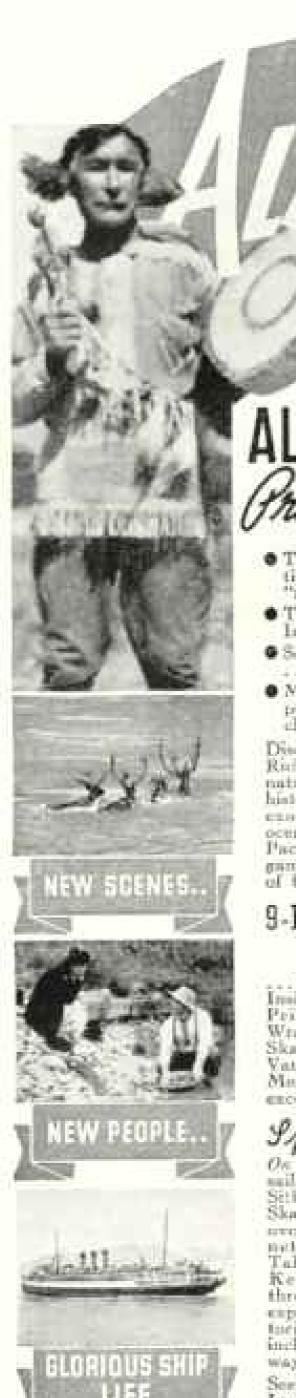
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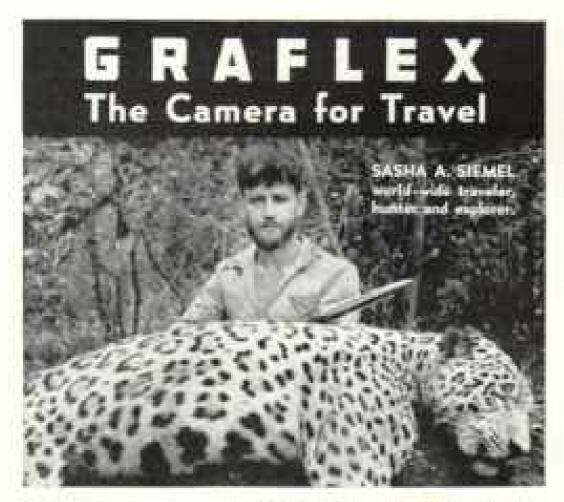


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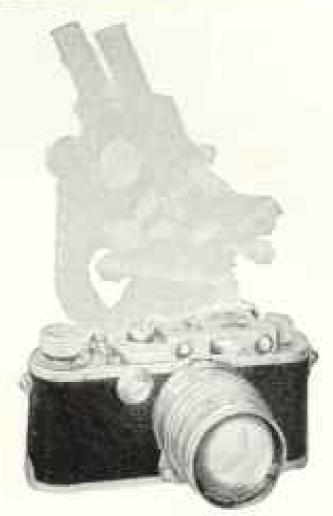
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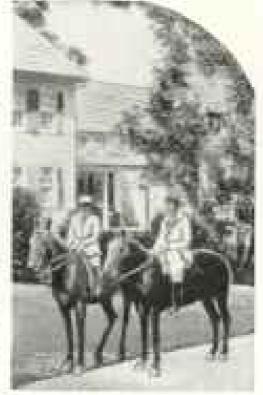
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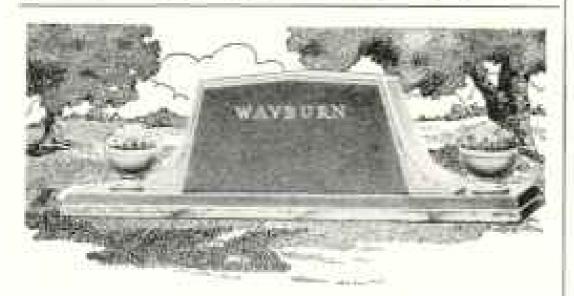
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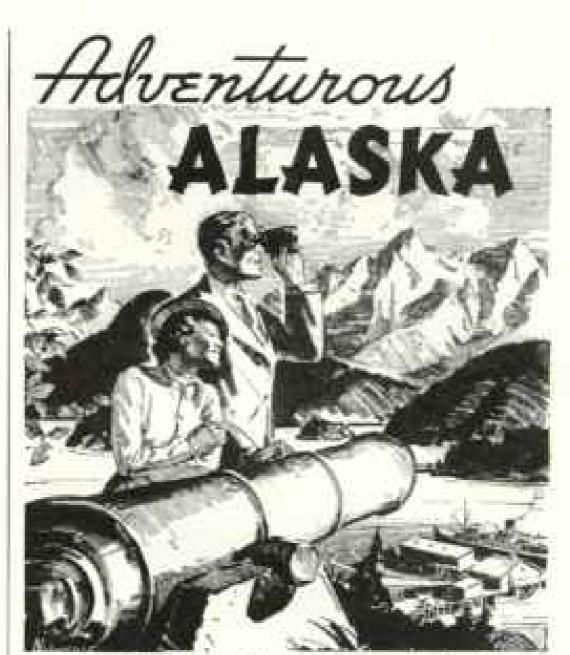
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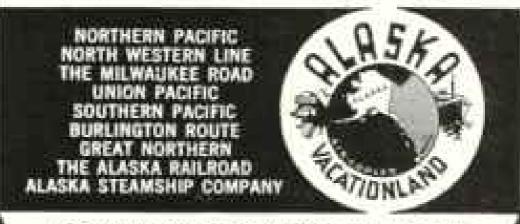


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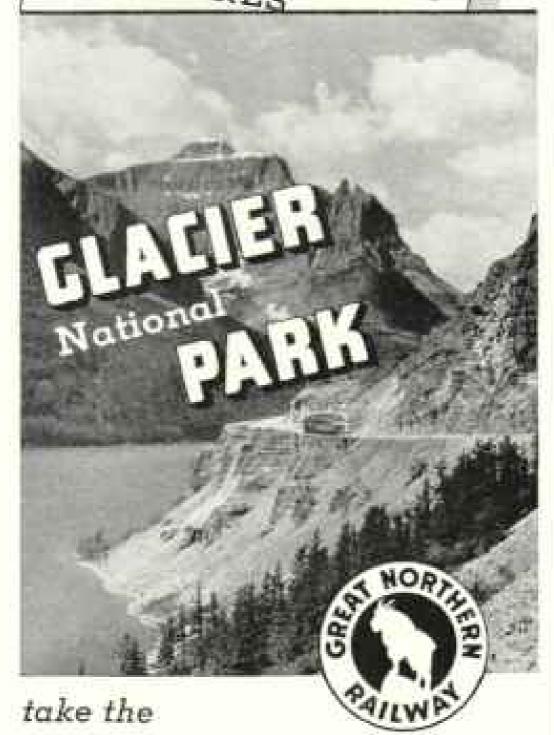
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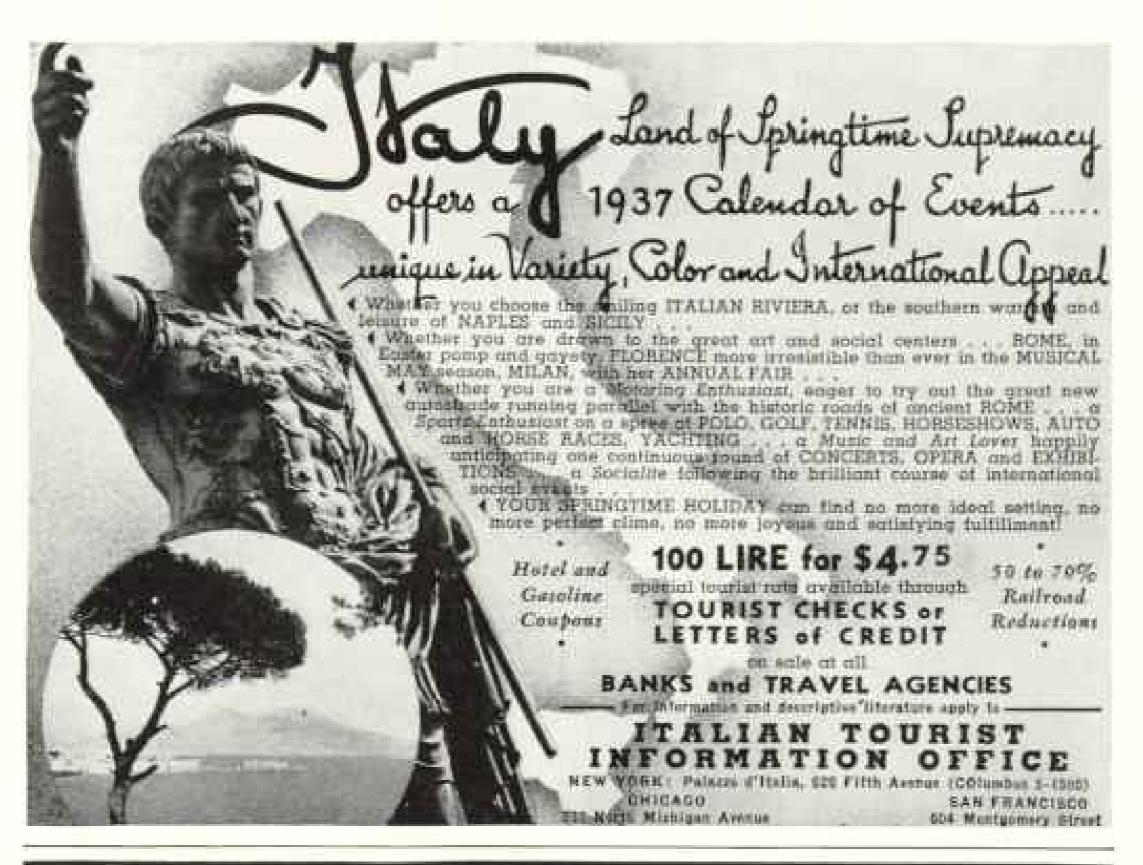


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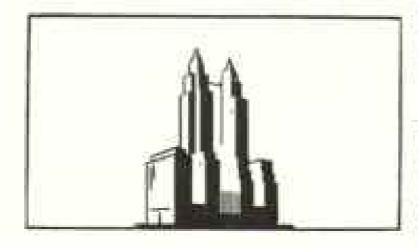
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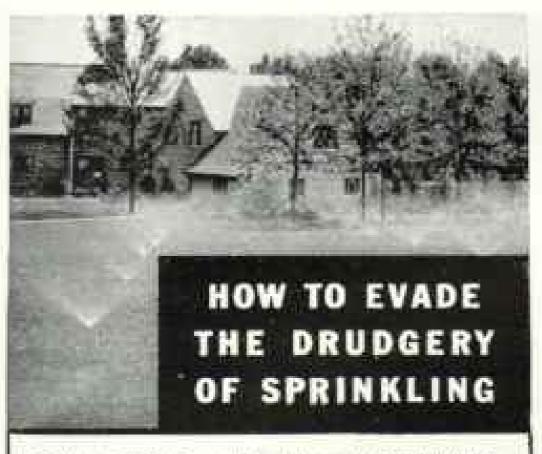
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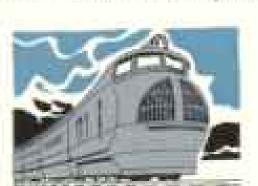
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