THENATIONAL GEO GRAPHIC MAGAZINE

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TWENTY-FOUR PAGES OF ILLUSTRATIONS IN FULL COLOR

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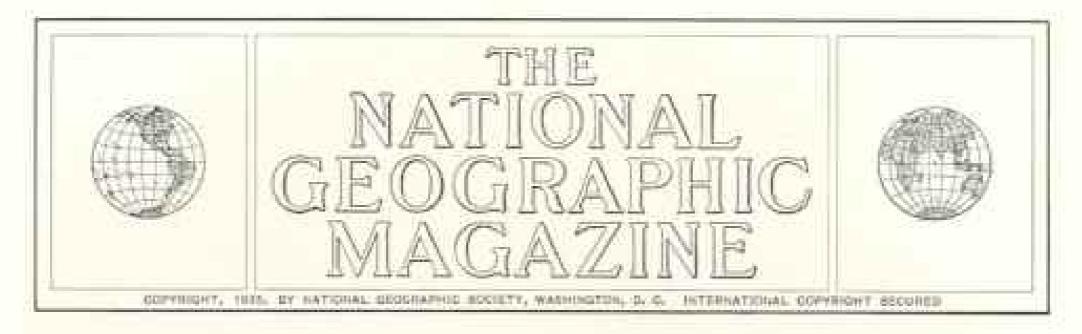
A. J. VILLIERS

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ENGLAND'S SUN TRAP ISLE OF WIGHT

By J. R. HILDEBRAND

ADDRESS OF "EDUCATIONS, ATHEORY OF THE NORTH," "THE WORLD'S GREATEST OFFICIAND EXPLORES," "ROYAL COSENHAGEN," "MAN'S PROCESS IN CONSTRUCT THE AIR," REC., IN THE NATIONAL GROCKAPHIC MAGAZINE.

NE could forgive the pun, "It should be spelled the Isle of W-h-i-t-e," as our ship steamed along the glistening chalk cliffs toward Southampton. Soon the white ramparts leveled down to soft, green knolls, with grass growing to the water's edge, as we veered into Spithead, on the north coast of The Island—the residents usually omit the Wight—and passed the neat water front of Cowes.

"So you are going over to Wight," brooded the perennial transatlantic traveler, with arms on deck rail. "This is my fourteenth crossing and I have not been there yet. They look so bleak, those cliffs; then, the boat train for London is always waiting."

My photographer companion, who joined me on the little steamer that was to take us back to Cowes from Southampton, held much the same view. It was autumn; the flowers were about gone in Sussex and Kent. Why drag color equipment over there? The sheer white cliffs, the expanses of verdure were all very lovely, but they were not "color."

A stiff breeze across the upper deck—a vantage point to which we had to pay three-pence admission over the regular fare—blew away our skepticism. The harbor of South-ampton is as startling, even without sky-scrapers, as that of New York. Big ships and little ships compactly docked, like rows of sea-going apartments, fly flags of many nations—we counted eighteen—and always flitting about are the fussy tugs and tenders.

Soon we were tossing against a vigorous and choppy sort of tide.

"These queer tides tell the story of Southampton," our skipper explained. "Wight is a sort of cork in this harbor; it is The Island which makes Southampton a port that can handle ships like your Leviathan and our Berengaria.

"The incoming tide splits on the island. It piles up the Solent funnel on one side; then, a few hours later, it follows through Spithead on the other side (see map, page 6). That is why the world's biggest liners can dock here."

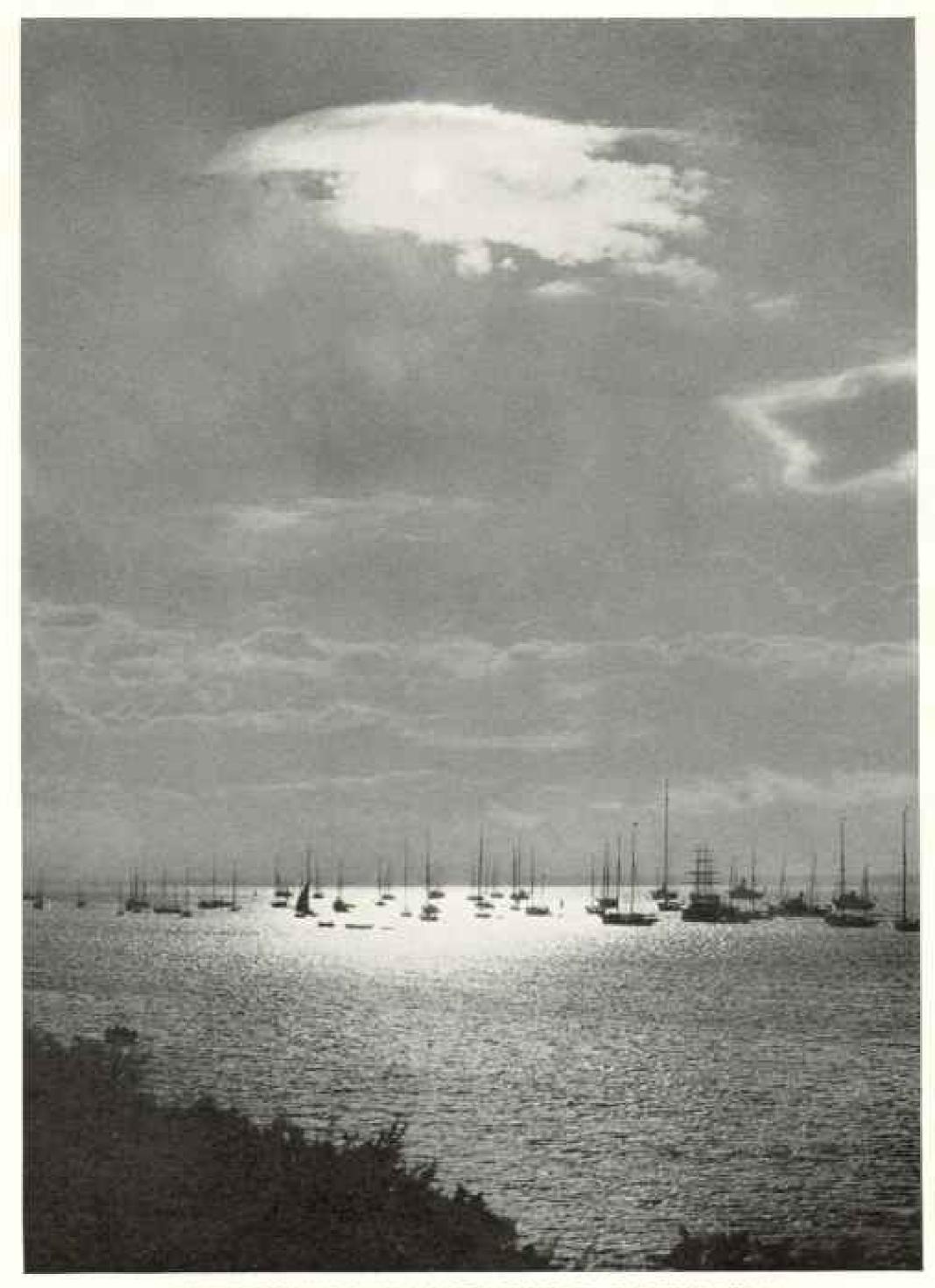
"BANG AROUND THE CORNER"

"No need for a taxi, sir. Your hotel is bang around the corner," said the driver we approached at the Cowes landing.

We followed him and our bags into High Street—narrow, spick, and serpentine down the middle of the road, every whit as smooth and clean as the fractional sidewalk. The latter seemed to serve principally as stepping stones to the homes and shops built flush upon them, or as platforms for neighborly chats.

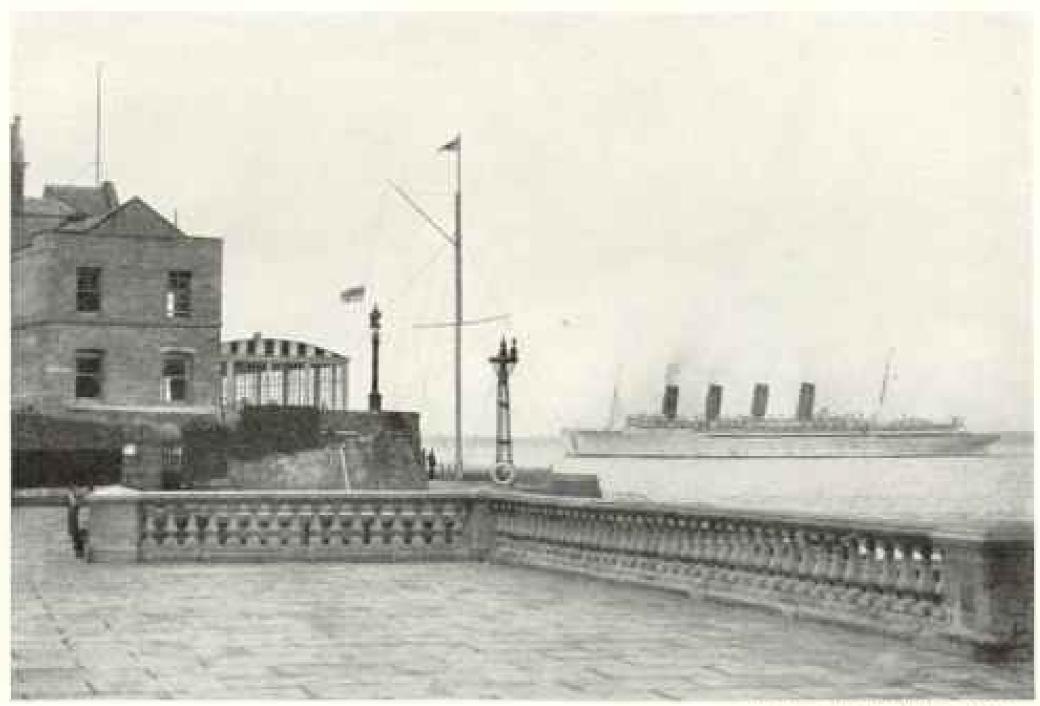
Quaint, ancient houses alternated with stores that displayed anchors and steering wheels, nautical caps and field glasses, marine photographs and all the burnished brass appurtenances of yachting. Every few doors tearooms offered tempting scones and crumpets; and there were miniature branches of famous shops of Regent Street and Piccadilly.

Many of these latter were "By appointment"—for when members of the Royal Family regularly patronize a shop it is under



SUNSET ETCHES THE DELICATE LINES OF GRACEFUL SHIPS

Siender masts, not telephone poles, line Cowes Roads during famous Regatta Week (the first week in August). Then the pleasure yachts and excursion boats house a water population of thousands; for the town's hotels and homes cannot accommodate the crowds. Many other races are held in these waters in the summer, and they are frequented by the owners of sailboats of all kinds.



Photograph by W. Robert Moore

A LUXURIOUS LINER SAILS BY "THE WORLD'S MOST EXCLUSIVE CLUB"

The Masoretania steams within half a mile of Cowes, as all transatlantic ships docking at Southampton must. The glass-enclosed pavilion of the Royal Yacht Squadron is the grandstand for royalty and other distinguished members for the races of Regatta Week.

no pledge of secrecy, as is the case with our White House shopping—and most of them had their prices marked in guineas, not pounds, subtle hint of exclusiveness, for which the customer pays an extra shilling.

Ahead of us spread the spacious Esplanade, with the Royal Yacht Squadron headquarters projecting upon it; we were on the plaza of the yachting capitol of the world.

The sun glistened upon the plate glass of the protruding gallery, grandstand for royalty and high naval officers, who largely constitute the membership of the "most exclusive club in the world."

There they watch the races of Regatta Week, when the Solent waters are flecked by fleecy clouds of canvas, dotted by rainbow bunting and pennants, and, when night comes, aglitter with myriad bobbing lights.

Members of this club, and none other, may fly the white pennant of St. George * on their yachts; only members and officers of the Royal Navy are privileged to land at its neat jetty.

* See "Flags of the World," by Gilbert Grosvenor and William J. Showalter, in the National Geographic Magazine for September, 1934.

One world-famous yachtsman, who spent millions upon his hobby, was not admitted to membership until shortly before his death.

The clubhouse is as formidable as a castle on the Rhine. Indeed, the present building was adapted from a castle of the time of Henry VIII. "Recently," said an attendant, meaning in the 17th century, "it was used as a state prison."

WHEN YACHTS WERE MEN-OF-WAR

Originally the club had a more utilitarian aspect than being a base for floating palaces and racing machines, "metal torpedoes, with balloons affixed to them." Patriotic members had their craft fitted out with brass cannon, and stood ready to chase raiders or privateers. Lord Yarborough, arch enemy of the railroad invasion of The Island, paid his crews a bonus if they would abide by the regulations of the Navy's men-of-war. In signing this agreement they agreed to discipline which permitted free use of the cat-o'-nine-tails, should a sound flogging be called for.

In the shadow of the club we found our hotel, a little more capacious, but typical



(f) Beken and Sun

A FAMOUS VANKEE-BUILT RACER RUSHES OVER THE FOAMING SOLENT

The fine old schooner Westward has raced for a quarter of a century, pitting her speed against the King's Britannia and other yachts of international renown. One of the swiftest products of American yards, she became a member of the German Kaiser's racing fleet before the war and in 1924 was bought by T. B. F. Davis, British sportsman living in South Africa.

of the inns of the island. To the right was a dining room like that of the old manor houses; to the left was a lounge furnished like the drawing room of a village rectory.

The registration desk and the porter's office were concealed in a niche of the rear hall, lest they obtrude any hostelry aspect on the homelike atmosphere. Yes, we had reservations, and this fact was verified, though there were only three other guests. We had been told elsewhere, "If you don't wire ahead, sir, you are not known." Just how a telegram from London identifies one in the provinces was not clear.

SPEECH OF ELIZABETHAN TIMES

Our pedestrian "driver" promised to bring his car around "bang at eight" next morning to take us about The Island. And he was on time. A sturdy, independent folk, these insular people, who for the most part go "over to England" rarely, but welcome the "ovener" with matter-of-fact hospitality.

Their speech is redolent of words and phrases one remembers seeing only on the printed page—in Shakespeare, Congreve, or the King James Version. Often, when cold, it was "a bit scrow"; a clear forenoon was "a pride morning." A villager apologized to us that a coke "factor" chimney "hides that nice view up"; a farmer lamented, "Tis the curse of my field, those weeds."

After dinner we strolled toward the Floating Bridge—the ferry to East Cowes—and wondered at the constant exchange of "Good night," "Good night," all along the way.

"Is there a curfew about to ring?" we inquired of a "bobby."

"Oh, no, just friends greeting each other," he explained. "Over in England they would be saying 'Good evening."

There is music in the names picked at random from the island's map.

"Is it an itinerary or are you trying your hand at a poem?" laughed my companion, as I read him a list of some of the places we should visit: Wootton, Quarr, Whippingham, and Ryde; Brading, Arreton, Luccombe, and Ventnor; then Godshill, Culver, Yaverland, and Bembridge.

A second time we came out upon the Esplanade from the twisting lane which is



Photograph by W. Robert Moore

THE FLOATING BRIDGE COMES IN

The ferry shuttles between Cowes and East Cowes over the leisurely Medina. Smaller vessels still ply the river to Newport, which might better be called "Oldport" in memory of the time when its inland location, like that of Brading (see text, page 26), was a protection against sea raids. Horses and bicycles are still more frequent in Island traffic than automobiles

High Street, and this time it was pitch dark. Like a mirage against the black of water and sky was a huge, luminous transatlantic liner; silent, its outline dim and eerie, but all its deck lights and bright portholes gleaming like myriad lanterns in a fairy palace.

By night or day all the big ships that put in at Southampton must pass the deeper channel within half a mile of Cowes (see illustration, page 3). The parapet of the Esplanade seems built as an elbow support to keep sea-gazers from tumbling into the water. All the houses on the gallerylike hillside of the town have enormous plateglass windows turned toward the sea. As a place to watch the world go by in ships, Cowes is an unsurpassed marine grandstand.

EAST COWES IS NAUTICAL

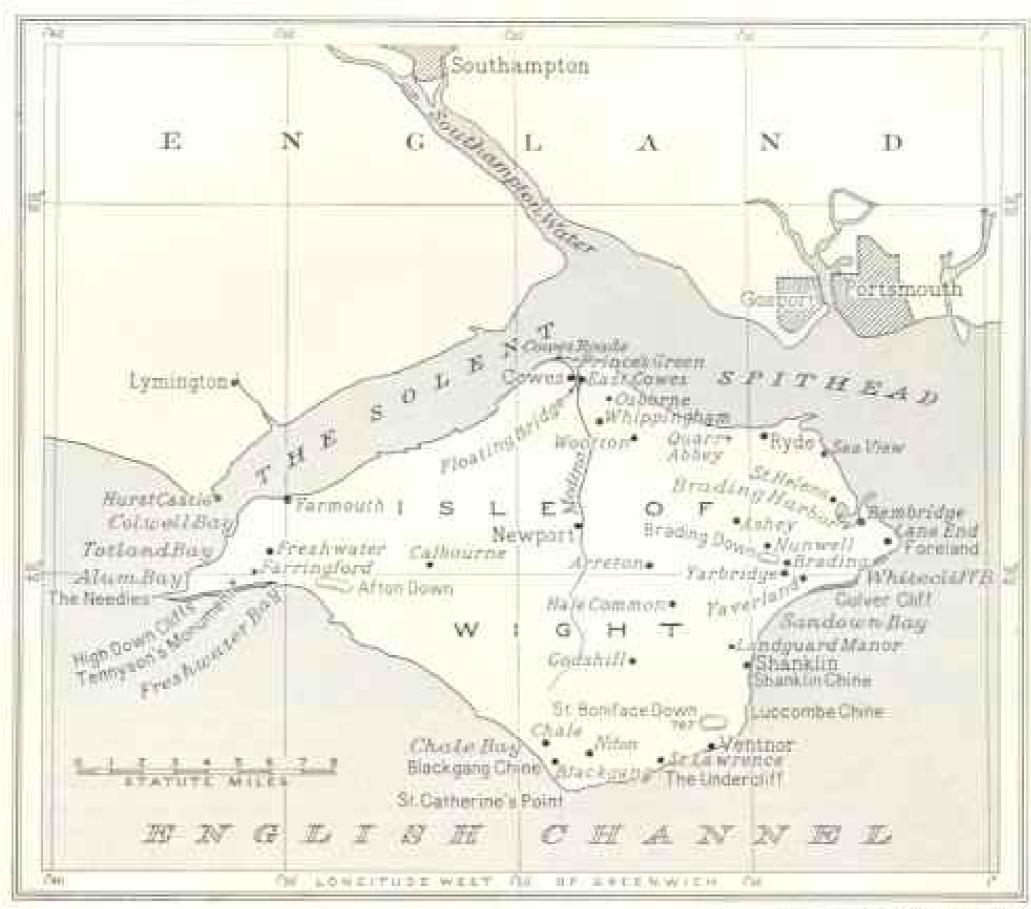
Across the Floating Bridge, East Cowes takes on the industries which Cowes proper, and consciously prim, seems to spurp. There is a ship-building yard which supplies lifeboats for steamers and for beach guards from Scarborough south to The Island's own week-end "tripper" resort, Ventnor, and there is an aircraft factory which builds amphibian planes.

Every other store on the precarious hillside streets is a reminder of The Island's intense preoccupation with the sea, offering paraphernalia ranging from oyster tongs to hawsers, and there are many shops that make shiny marine engineering parts.

It is not only the yachtsman whose mecca is Cowes. The owners of more modest sailing boats and small pleasure craft of all kinds find the numerous creeks and estuaries of The Island's northern shores fine havens for their sport.

"I was brought up in the Isle of Wight,"
wrote the famous Dr. Thomas Arnold of
Rugby, "brought up amidst the bustle of
soldiers, and from childhood familiar with
boats, ships, and the flags of half Europe,
which gave me an instructive acquaintance
with geography."

In a side street of East Cowes is the "shell house" where an ingenious citizen has spent his years in devising shell designs for walks, fences, flower beds, and mosaics



Drawn by Newman Burnstead

HENCE SAILED MARYLAND'S SETTLERS AND HERE THE AMERICA'S CUP WAS WON

Starting at Cowes, in 1851, the yacht America sailed around the Isle of Wight to capture the coveted trophy which is the blue ribbon of the sea for friendly international competition. Fashionable Cowes is the yachting capital of the world, while other towns bear traces of England's early history from Roman times through the era of William the Conqueror and the Domesday Book. The Wight might be called "The Island that everybody sees, but nobody knows," because transatlantic ships round it to land their passengers at Southampton.

on the walls. All of which would be only an oddity for sight-seers were it not for a story that goes back to the days before our Civil War.

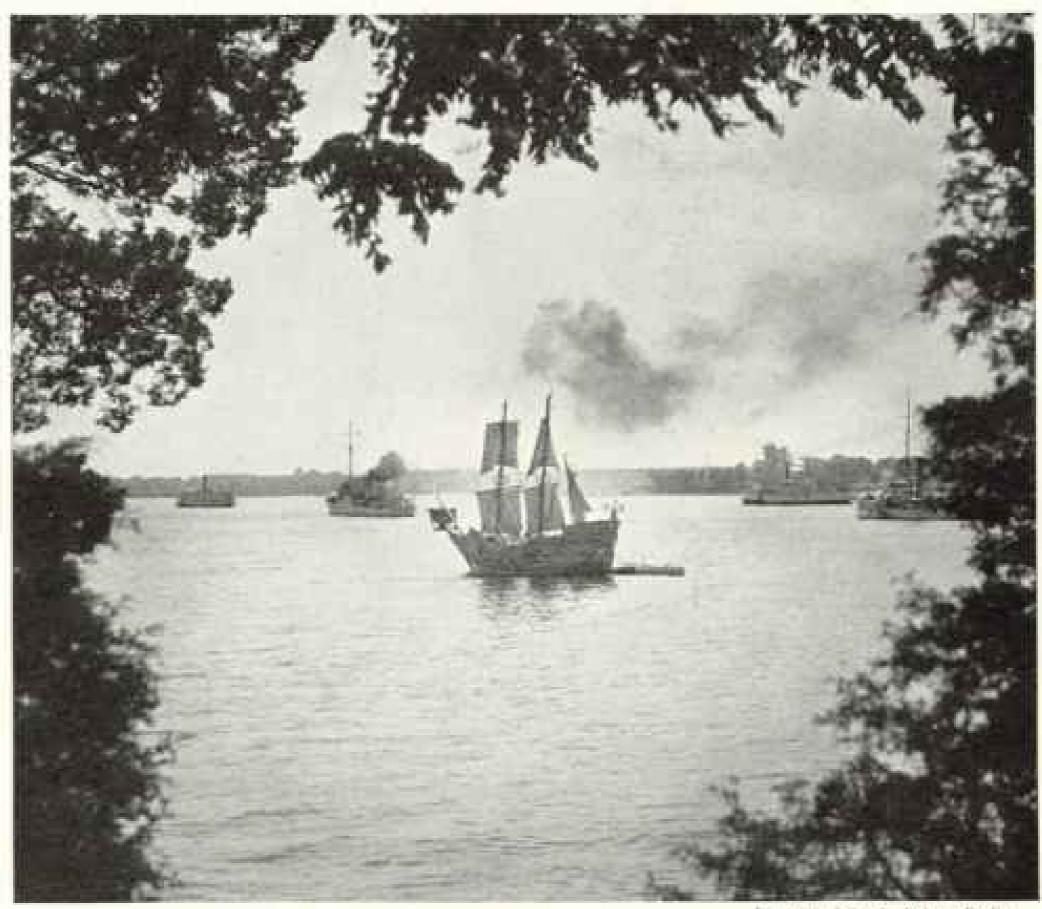
A nattily dressed lad was playing on Prince's Green, on the heights above Cowes, and, seeing a village boy with a basket of periwinkles, he yielded to a normal prankish impulse to kick the basket, scatter the gastropods, and run. The son of Cowes sprinted in pursuit, overtook his assailant, trounced him soundly, and one conspicuous result was a black eye.

When the aggressor's mother heard the details, she sided wholly with the boy of the basket and arranged for a handsome apology. The mother was Queen Victoria; the boy who kicked the basket was her son, later King Edward VII. Years afterwards the son of Cowes received from the Queen the modest dwelling which he converted into one of the sights of the vicinity.

MEMORIES OF THE VICTORIAN ERA

It was among the marshlands of East Cowes that the good Queen as a girl collected seaweed and formed an attachment for The Island that led to her purchase of Osborne House, which became her favorite place of residence (see pages 10 and 20).

It is there to-day, very much as she left it, a gift of King Edward VII to the Nation in her memory. A part of it is used as a convalescent home for military and naval officers. The house was remodeled by the Prince Consort, but not after the style we



Photograph by A. Aubrey Bodine

THE "ARK" OF THE CALVERTS SAW NO STEAMSHIPS OR FERRIES WHEN SHE SAILED INTO ST. MARYS IN 1634

This reproduction of Leonard Calvert's flagship was built for the tercentenary celebration of the settlement of Maryland by the voyagers who left Cowes, Isle of Wight, in November, 1633. Lord Baltimore named the Free State for the Queen (Maria) of Charles I to show his loyalty to the Crown; the Ark to proclaim his devotion to his church; and the Dove as an omen of the peace he hoped to establish in the New World (see text, page 33). Later the harassed Charles I was a refugee on the Isle of Wight, to the considerable embarrassment of his host, Sir John Oglander, who kept a careful expense account of his monarch's entertainment (see text, page 26).

now call Victorian, for it has more the appearance of an Italian villa.

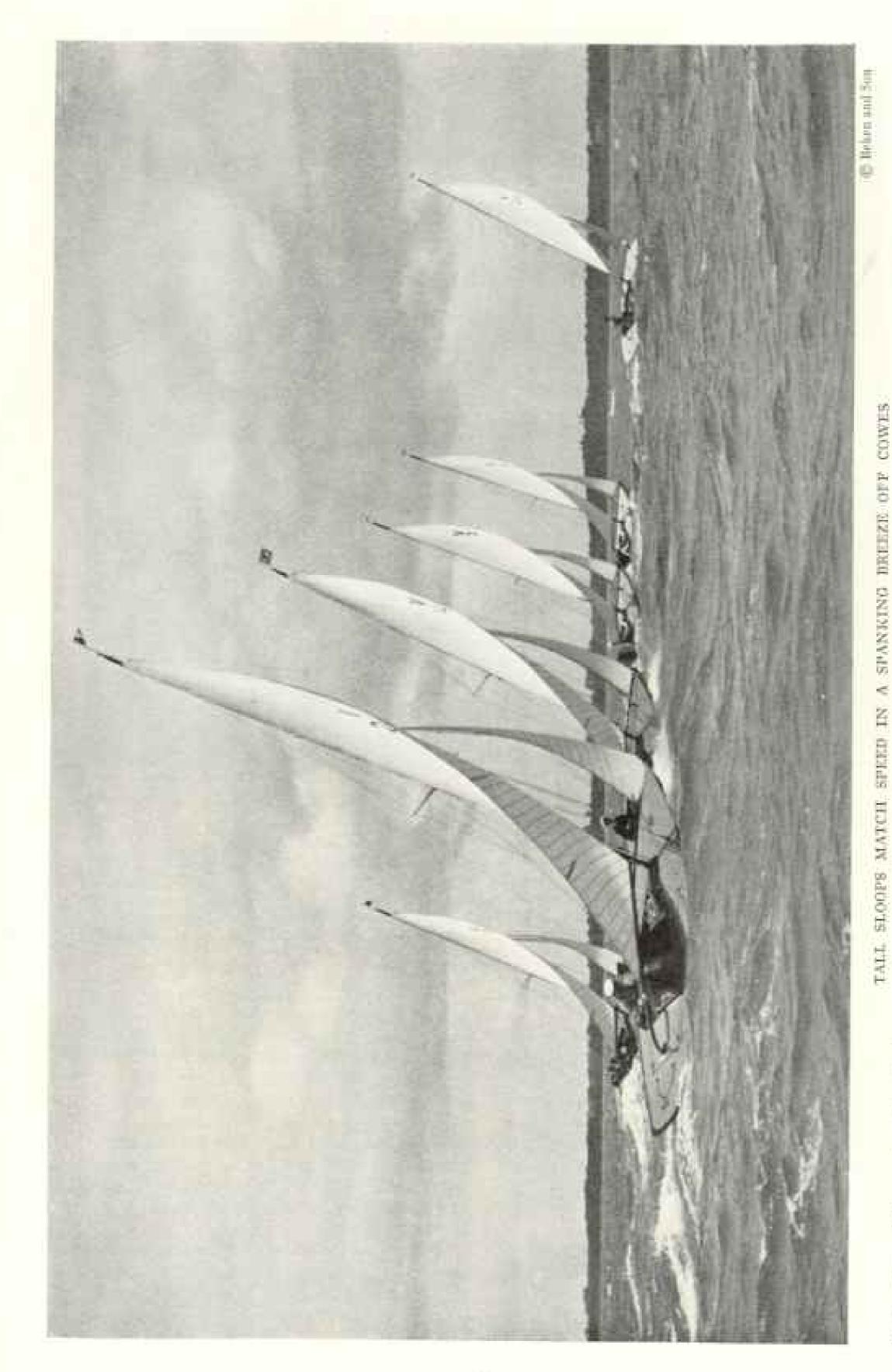
The terrace commands the marine view which the Queen loved, vistas of blue ocean through groves of exotic trees—corks, ilexes, deodars, as well as pines and cedars—many of which she and Prince Albert planted.

On the spacious terrace she planned were still in bloom the flowers about which my companion had been so skeptical, for The Island season is several weeks later than that of the mainland.

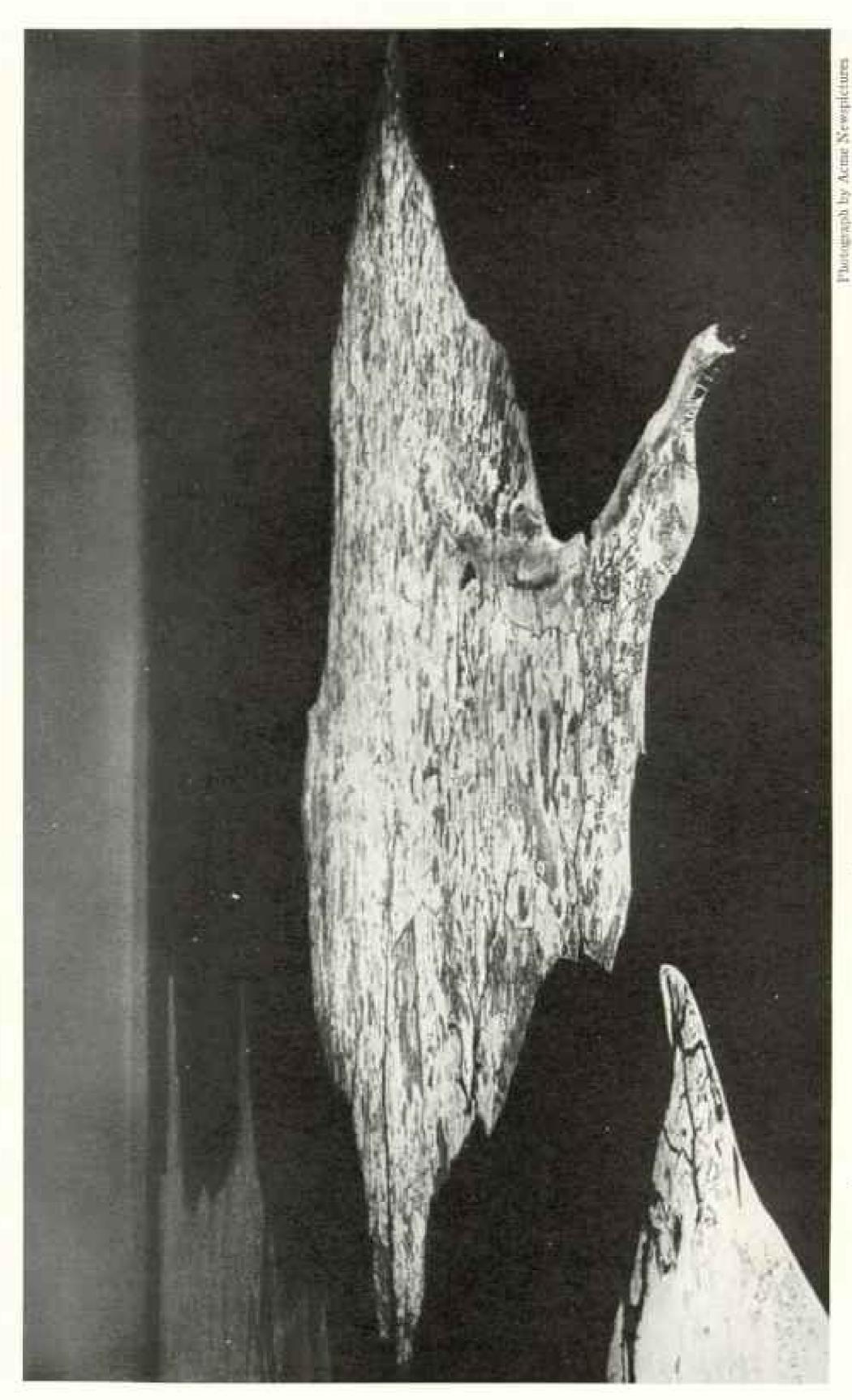
Her Majesty especially loved roses; she planted many varieties herself, and she assigned a special plot to each member of her family. In this setting in summers she often had al fresco breakfasts served with an accompaniment of bagpipes. The royal kitchen employed thirty persons; four East Indian subjects served at table.

The dining room still is intact where the table centerpiece was an enormous silver ship in full sail. Corridors are cluttered with the accumulated gifts of her long reign. Some are artistic, others are homely tributes to the affection in which she was held, but the entire array is very human.

The one chamber of truly regal magnificence is the Durbar Room, with its stone walls and ceiling carved in oriental designs, its stone peacock extending its colorful tail

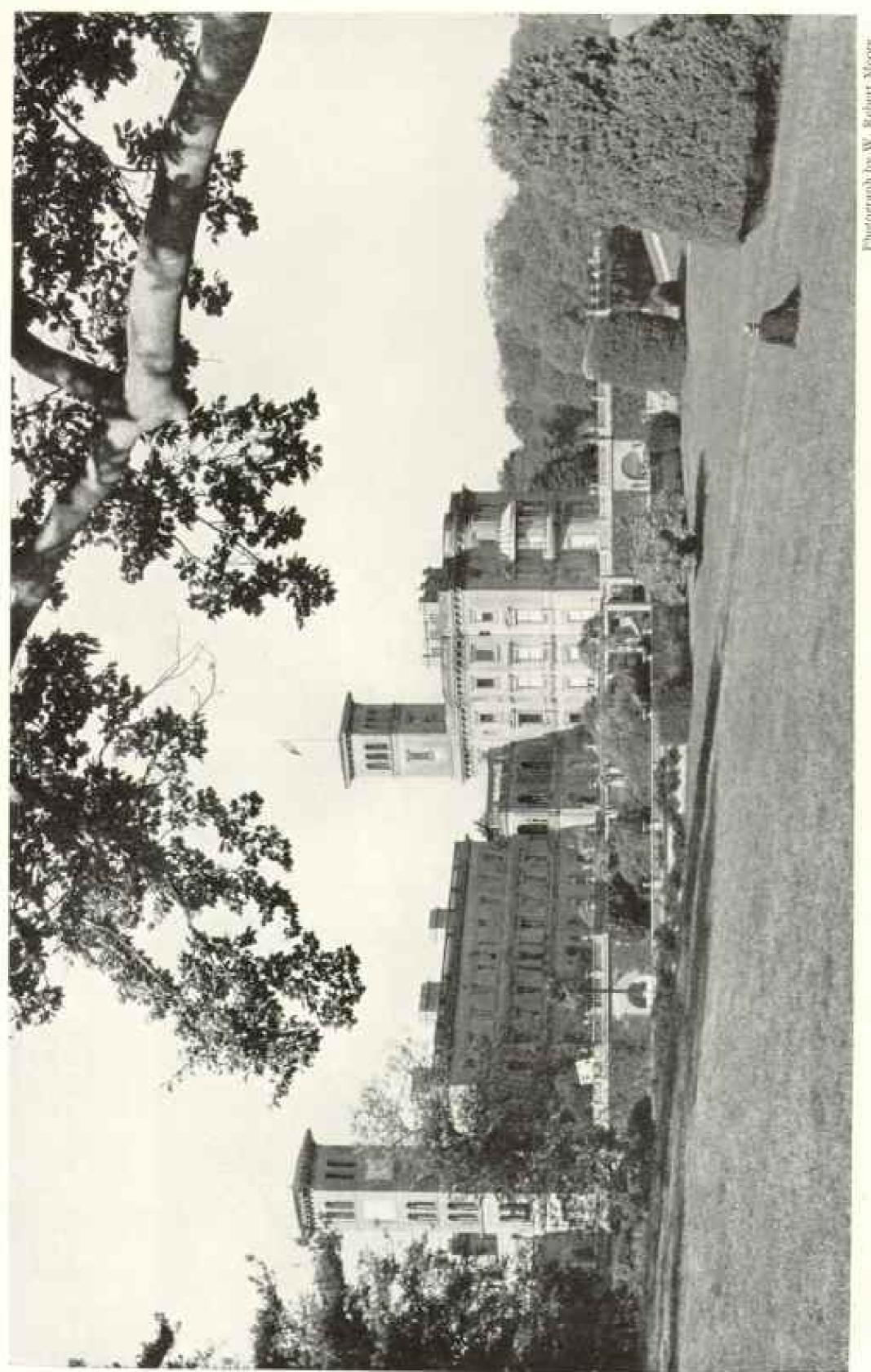


Trite and graceful as gulls on the wing, they speed over the white-cupped waters in one of the close and thrilling races for smaller craft. One holds a slight open-water lead and the others are in hot pursuit.



THE AERIAL CAMERA REVEALS THE ISLE'S CRUMPLED SURPACE AND THE WAY IT SPLITS SOUTHAMPTON'S TIDES

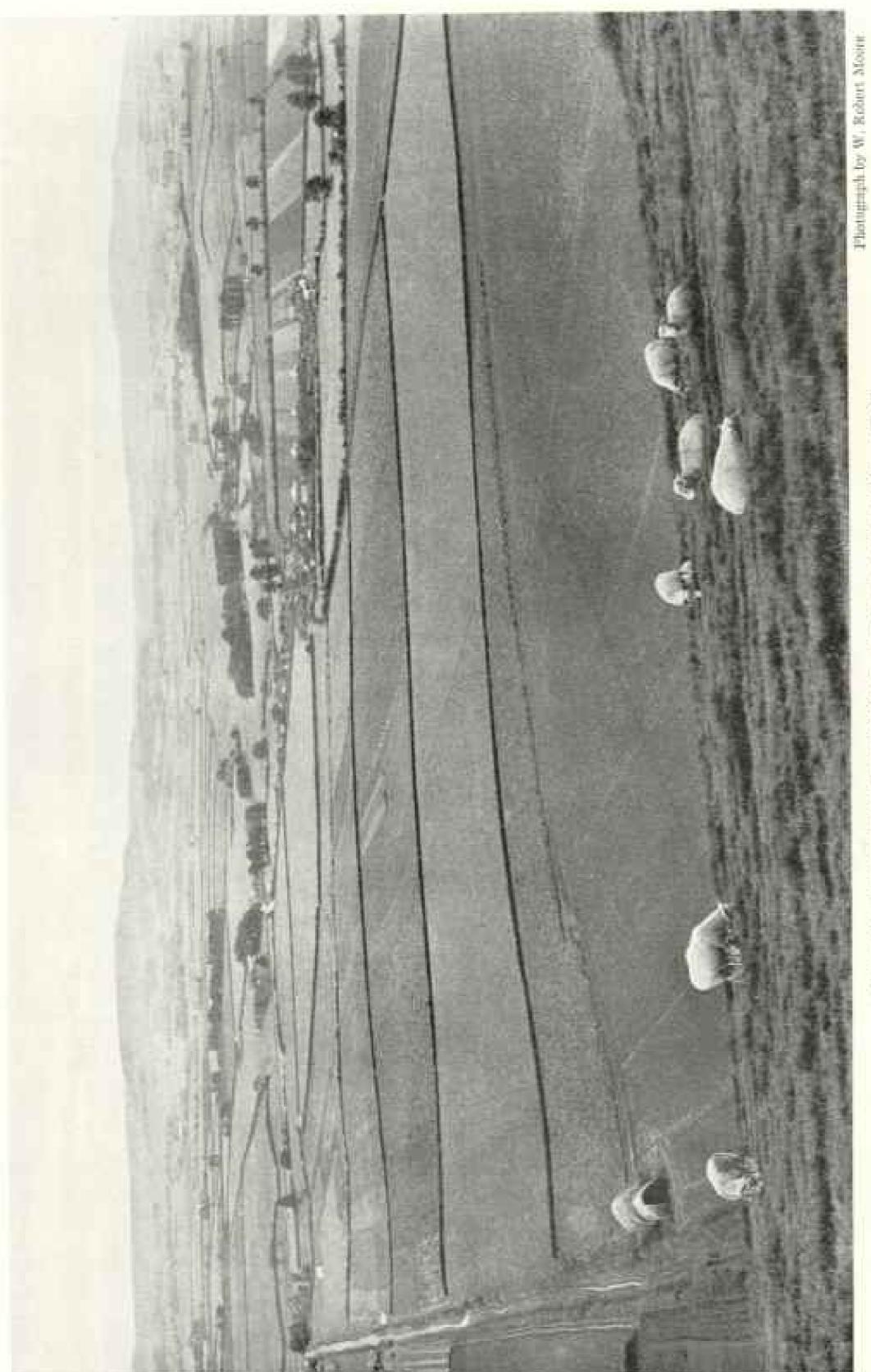
With infrared plates the photographer obtained, from 18,000 feet, this view of the entire island and the mainland. Hurst Castle, the tongue of mainland in the left foreground, marks the entrance to the Solent. The coast of Kent (upper left) is some 120 miles distant. Opposite Hurst Castle Varmouth pier is visible; Cowes (extreme left center) is seen at the mouth of the Medina River, which cleaves The Island to Newport; and, on the statem count (upper), the lofty cliffs are discussed in the round project The Needles, where the tides split as they flow up the Solent, then around The Island and up Spithead a few hours later. ships may dock (see map, page 6, and text, page 1), Thus Southampton has deep water where the world's largest



Photograph by W. Rabert Moore

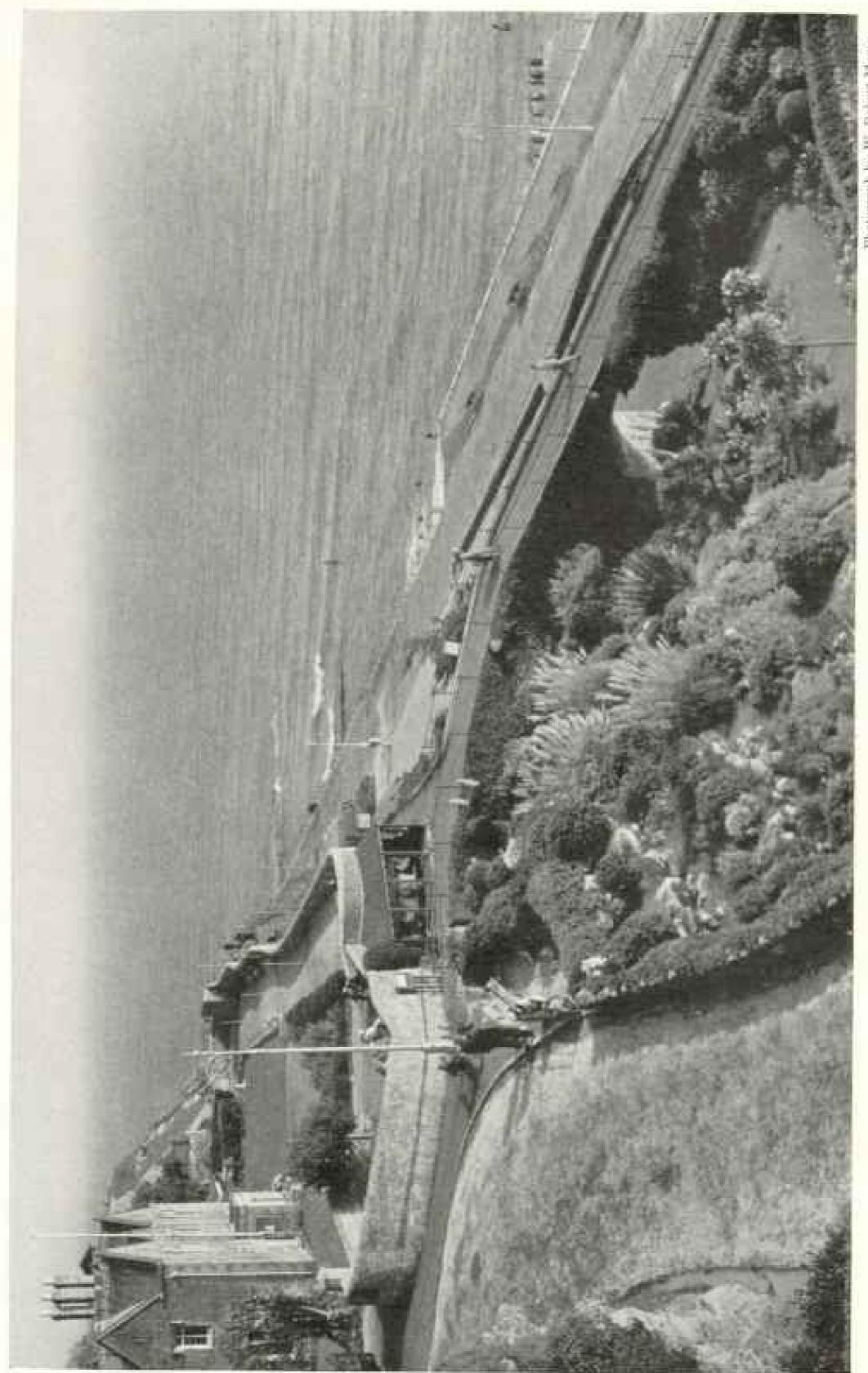
HOUSE QUHEN VICTORIA SERVED BREAKFAST WITH BAGPIPE MUSIC ON THIS TERRACE OF OSBORNE

The tambling matrion where the Queen spent so much time was planned by the Prince Consort, whose architectural taste ranged from the Venetian tower on the left to the London bay window on the right. After his mother's death King Edward VII presented the estate to the Nation, and it now is used partly as a museum and partly as a home for convalencent officies (see text, page 6).



IN SUCH SAUCERLIKE DEPRESSIONS THE SEA SERMS PAR AWAY

The southern part of The Island is known locally as the "bowl," and there the entircling cliffs and downs shelter farms and pastures from the severit winds and fogs. Sheep graze on the protected billsides, and in the "bottoms" truck gardeners raise vegetables for the mainland markets, especially a type of purple cabbage which is widely used for pickling. This photograph was taken from Brading Down.



Photograph by W. Robert Mone

VENTNOR INVITES THE SUN ALONG THE ENGLISH RIVIERA

Facing due south, the resort of the Undercliff coast (see page 31) has become popular as a winter haven. Its principal streets are parallel to the sea, and rise like tiers of theater scals, with every cottage turning large windows toward the beach. On the terraces above its spacious promenade, as crowded in summer as the Atlantic City boardwalk, are gardens with an amazing variety of plants.



ST. LAWRENCE OLD CHURCH IS THE ISLAND'S SMALLEST

Even after it was enlarged, it now is only 30 feet long and 12 feet wide. The north door was closed because, local tradition says, it was 50 low that a rector, late for services, struck his bend against the lintel and was killed. The older part of the edifice dates from the twelfth century.



LEAFY SHANKLIN'S FERN-CLAD CHINE IS AIR CONDITIONED

On the warmest days this shady ravine, so nurrow that one can almost touch both sides at some places, offers a cool, green retreat. Above is the tall gate where a threepence admission is charged to maintain the paths and guard fences.



"TWO QUARTS TO-DAY FOR GABLE COTTAGE"

The Island milk is delivered in two-wheeled carts; some are horse-drawn, others are hand-propelled.

Even in Cowes and in other large towns the houses are seldom numbered, but named.



Photographs by W. Robert Moore

A BOY SCOUT TROOP PARADES NEWPORT STREETS

Fashion and shipping have taken to Cowes. Ryde is the metropolis, but Newport remains the business center. The sign, "The Island Furnishers," indicates how residents refer to "The Island," seldom to Wight, and if that name is used it is "The Wight"

over the large fireplace, its cases with the gold and jewel offerings of such fabulous potentates as the Gaekwar of Baroda, the Begum of Bhopal, the Nizam of Hyderabad.

In her black mushroom hat and white
shawl, the Queen would
ride for miles in her carriage and pair around
her own grounds. When
she drove out through
The Island roads she
was preceded by an
outrider. She would
greet the residents,
often stopping to chat
with neighbors of the
countryside.

One citizen, she learned, was an architect. Whippingham Church, near by, had been "restored" for her, but apparently she was not quite satisfied with the result. Summoning him to Osborne House, she inquired what could be done. With characteristic island forthrightness he replied, "Nothing can be done, madam, but tear it down."

The church was not torn down; it stands today, with its peculiar rotund spire in the center of a squat tower and four diminutive spires around it—a rather.

congested treasury of royal memories, tablets, inscriptions, and medallions.

Within the precincts of the estate is the Swiss Cottage where the Queen instructed members of her family in the household arts. The kitchen still has the small stoves and the cooking utensils used by the royal children.

As relaxation after long hours in the very shrine of the Victorian era, we contemplated a ride across the heart of The Island to a place whose name fascinated us—Godshill.



Photograph by W. Robert Moore

"TO VICTORIA THE QUEEN"

In the market square at Newport the "People of The Wight" erected a monument to the monarch who spent so many of her days at Osborne House (see text, page 6, and illustrations, pages 10 and 20). On market days the base is hidden by stalls of venders of rabbits, sheep, chickens, even cows, brought from all over The Island. On the building to the right, just above the sidewalk, may be seen the curious apertures, or ventilators, in compliance with an old town by-law which required 12 inches of air space beneath the ground floor of every house.

The only question was whether, when we arrived, we could get tea.

"Can you have tea at Godshill? Well, just wait and see!" exclaimed our driver, and to a cryptic smile he would add no further comment.

THROUGH THE ISLAND COUNTRYSIDE

To reach any part of The Island entails no longer journey than taking a taxi across Greater London; it is not quite 23 miles long and nowhere wider than 13 miles.

Heading due south, across its axis, gave us a quick picture of its peculiar geography. At first the countryside was wooded, and the clearings were fields and meadows where cabbages, carrots, and broccoli grew, or

sheep and cattle grazed.

From the thick forests of the northern island came the timbers of many an old mansion and cottage of southern England, and to-day their dining-room tables are provided with vegetables by The Wight's truck gardens and rich milk from its herds of Guernseys. We saw flocks of the Dorset Horn sheep for which The Island is noted and many of the Shetland ponies it more recently started breeding.

Anyone who has eaten in English inns or on English trains must wonder about the source of all the cabbage served with potatoes at nearly every meal. Wight can account for many tons of it. We stopped at one farm where the grower proudly showed us a new machine which would set out 2,000

cabbage plants an hour.

Soon the trees and the farms gave way to vast expanses of acres carpeted with heather, gorse, ferns, and occasional low, wind-blown trees. We were climbing the

downs (see page 24).

The prospect, literally and figuratively, took our breath away. The waves of rolling countryside seemed to merge into the breakers of the distant sea. A high wind made going bard when we left the car to tramp along the alluring footpaths of the uplands.

The feeling of being alone, in high command of all one surveys, is akin to that of riding in an airplane, when the people of the world below are pygmy size, and their structures and affairs seem puny and remote as one glides through the clouds.

AN EXHIBIT OF THE EARTH'S MAKING

The downs, with as many sectional names as a London street, are formed by chalk uplands which stretch straight west and east across The Island, humping to some 700 feet at places, and thrusting fractured fragments into the sea at The Needles on the west and Culver Cliff on the east (see map, page 6). The pedestrian who yields to the spell of their lonely paths gets an impression of a height much greater than the altitude of the downs warrants. One can climb across them in an hour's walk at their widest expanse.

Even to a neophyte in geology the brief ride from seashore to the summit of the

downs discloses successive layers of sand, mari, clays, gravel, and chalky cliffs that tell why Wight is a happy hunting ground for students of Mother Earth's structure. They might have been cut out by Nature, one admirer proclaims, for a geological model to illustrate the principles of stratifi-

cation (see page 9).

We descended into the "bowl," the southern half of The Island, sagging between the downs and the seaside cliffs that look so bleak to ship passengers as they round The Island for Southampton. Barren they are, these corrugated cliffs, but the islanders call them their sun trap because they cut off the fogs and temper the ocean winds. The trees are not so many, but the soil is fertile, the climate is milder, and the crop yield greater in this sheltered saucer.

GODSHILL, AND THE "DEVIL'S ACRE"

We rounded a curve and Godshill came into view-a view that should have been framed just as we first saw it, as the perfect picture of a traditional English village. It was like finding an old woodcut from a page of Dickens (see page 17).

The massive square tower of the ivygrown church dominated the stone houses that nestled around the Hill in picturesque disarray. Some were overrun with rambler roses, and along the roadside were timbered dwellings with thatched roofs. By a brook sleek cows grazed beneath patriarchal trees.

As we strolled through the hillside streets, the reason for our driver's amusement at our question about tea became evident. Virtually every cottage bore a sign offering refreshment. It developed that very few had any thought of serving tea or any provision for doing so. But some years ago. we were told, Queen Mary passed this way and, seeing the one cottage that then advertised "Home-Made Tea," she had stopped. Immediately all the roadside cottages hung out signs in hope of another royal visit.

The town owes its provocative name to a far older legend. Workmen started building the church on the level ground, but when the walls were half completed they awakened one morning to find them demolished and the stones piled on top the hill. Twice again they started building at the same site; each time they found their stones removed to the hilltop.

The fairies, it seemed, held their revels on the lowland, and the little creatures resented any ecclesiastical intrusion. So the



C National Geographic Society Finlay Photograph by W. Robert Moore GODSHILL IS THE PERFECT FICTURE OF AN OLD ENGLISH VILLAGE

Tradition overs that the foundations of the church were first laid at the base of the eminence, but invisible hands by night removed them to its crest, thus giving rise to the name "God's Hill." According to local tale, the Queen, while visiting the island, once stopped for tea and scones at the Essex Cottage (left), and since that time practically every cottage in the village has become a teashop.



Many of the rural homes and farm buildings are thatched. Cattle and sheep graze on the grasslands of the open chalk uplands, known as the downs.



C National Geographic Society

Finlay Photographs by W. Robert Moore

MASSES OF BLOOMS MAKE PRAGRANT THE YAVERLAND MANOR GARDENS

The home, with three additional gables extending beyond this wing, is a fine specimen of Jacobean (early seventeenth century) domestic architecture. It stands only a half mile inland from the curving sweep of Sandown Bay, at the east end of the island.



LANE END RESIDENTS LIVE ON THE HARVEST OF THE SEA

The husbands and brothers of these women of this tiny hamlet, near the quiet resort town of Bembridge, spend most of their time fishing and tending their crab and lobster pots,



(2) National Geographic Society

Finlay Photographs by W. Robert Moore

MODERN BUILDING BOOMS HAVE PASSED CAUBOURNE BY

Around these thatched-roofed cottages, smothered with flowers, clings the peace of rural England. Only a radio aerial, projecting from one of the upper windows, and the wire netting which holds the thatch in place, show modern influence.



HERR A BRITISH PLAYWRIGHT PINDS RETREAT

Perched high on the sheer cliffs of Luccombe Chine and surrounded by tefraced gardens, the mansion provides seclusion, but is only a few bours distant from the London theaters,

SO National Geographic Sciences

QUEEN VICTORIA LOVED OSHORNE HOUSE

Here she passed many delightful days and here, in 1901, the died. The stately residence, now a military hoppital, is located near East Cowes and overlooks the blue waters of the Solemt.



ID National Geographic Society

COOD MORNING, DLACK-EYED SUSAN

space about this row of thatched cottage has its flowers. Lacking garden space about this row of thatched cottages at Wootton, the beds of gay blooms have been crowded close to the doorways and walks. Willow wattles are used to bind the thatch in place.

COLDFISH PLAY IN A MOON-REPLECTING POOL

Although it was found that the moon seldom rose high enough above the trees to shine in the water, the basin is a marked success as an aquaritan and as a mirror for banks of flowers. It graces the garden of a large estate.



IN RYDE EVEN THE LAMPPOSTS WEAR GARLANDS OF FLOWERS

The pier, providing a path for pedestrians, a tramway, and a railroad, is nearly half a mile long. Its dome-shaped pavilion, in which concerts are given nightly during the holiday season, will seat a thousand persons. The vicinity of Portsmouth, on the English mainland, is visible in the distance.



Mational Geographic Society

Pinlay Photographs by W. Robert Moore

A VARIETY OF CLAY PRODUCTS COMES FROM AN ISLE OF WIGHT KILN

Garden wases, fountains, queer statues, and busts, as well as tiles and bricks, are made at this factory, situated in one of the valuable clay beds of the island.



NUNWELL RECALLS MORE HISTORY THAN ANY OTHER MANOR HOUSE ON THE ISLE.

This ancestral seat of the Oglander family stands at the foot of Brading Down in the midst of flower gardens. Roger de Orghandes, founder of the family, came to England with William the Comperor. The left wing is the oldest part of the home.

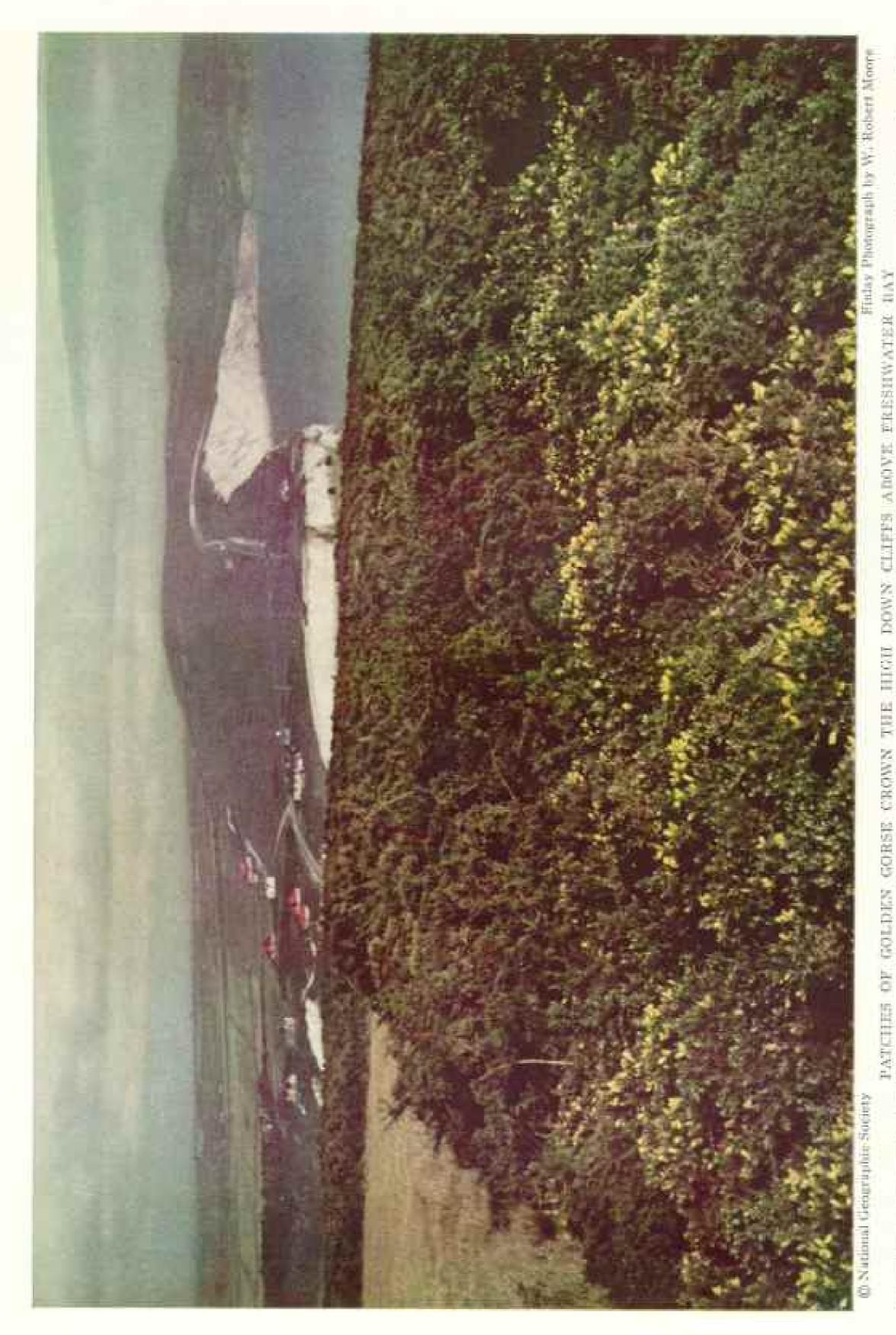


(in National Geographic Suciety

Finlay Photographs by W. Robert Moore

KEATS SANG OF NATURE NEAR THIS ESTATE

Shanklin, with its Keats Green above perpendicular sea cliffs and its famous Chine that has cleft the high rock walls, has become one of the most popular resort towns in the Isle of Wight.



Over the greensward of this treeless chaft upland, similar to those found in southern England. Lord Tennyson used to enjoy walks during the wildest weather. Within a mile from where this photograph was taken is a cross, erected to his memory. On Afron Down, in the distance, is a goll course.

builders took the hint, built their edifice on "God's Hill," and the fields below came to be known as the "Devil's Acre."

In the dim light of the lofty church one comes upon many reminders of island history, such as the painting of "Daniel in the Lion's Den," which some critics attribute to Rubens. It is a remnant of the fine collection of Sir Richard Worsley, connoisseur, traveler, and chronicler of early island history.

AN EPITAPH AND THE ISLAND PEPYS

There is a reminder of another island historian, Sir John Oglander, whose memoirs, had they related to the mainland lines of English history, probably would be as immortal as those of Pepys. A crumbling stone bears an epitaph of an island worthy of long ago:

"Here lies the mortal part of Richard ——,
While his freed spirit meets with heaven's reward;
His gifts endowed the schools, the needy raised
And by the latest memory will be praised."

There is more about "him whom virtue clothed with fame," but one's faith in epitaphs is shaken when reading Sir John's more realistic account of the same personage. He wrote (translated into modern spelling): "Richard was a notably sly fellow, dishonest and given to filching: he brought some tricks out of France with him. Vide—he would steal a cow, and putting a loaf of bread hot out of the oven on her horns, make her horns so supple that they would turn any way he pleased, so as to disfigure the beast that the owner might not know her again."

FROM BADD TO VERSE

Of another citizen, High Sheriff Emmanuel Badd, Sir John penned succinctly; "By God's blessings and ye loss of 5 wyfes, he grewe very ritch," and the tombstone of the fortunate sheriff, in St. Helen's Church, has inscribed upon it:

"So good a Bad doth this same grave contain, Would all like Bad were that with us remain."

An early intimation, perhaps, of the island humor that still has a predilection for puns. A favorite postcard proclaims such natural wonders as "Cowes where there are no cattle; Downs that are up, and Freshwater that is salt." And billboards, which are happily rare, herald that "you can whip our cream, but you can't beat our milk." Godshill is sequestered, well off the beaten path of island travel, because it is an inland town. Most of Wight's attraction for visitors and its wealth of historic association—ranging from the Roman occupation, through Jutish immigration, Danish assault, French attacks, and pirate raids—cling to its coast.

Eastward from sedate Cowes is the upand-coming resort town of Ryde, with its lampposts that wear garlands of flowers (see page 22), its tiny tramcars, and its spick promenade where, on cloudless days, women knit as they garner sun tan.

Its long, spidery pier is landing place for thousands of "trippers" from Portsmouth every summer week-end, and its domed pavilion offers concerts and "snack" counters for their entertainment.

Ryde is the island's metropolis; it has little antiquarian interest, but it surprisingly lacks any of the jerry-building prevalent among some resorts. It owes its popularity to its accessibility and to a topographical circumstance quaintly described many years ago by Fielding, father of the English novel, who wrote: "Its soil is a gravel, which, assisted with its declivity, preserves it always so dry that immediately after the most driving rain a fine lady may walk without wetting her silken shoes."

THE CHILDREN'S REGATTA

Second only to Cowes Week is the regatta of Ryde's Royal Victoria Yacht Chib. And a pretty touch is a children's regatta, held at their large Boating Lake, where young mariners sail elaborate toy craft and ride about in paddle-wheel boats propelled by handles.

It is a short walk from modern Ryde to medieval Quarr Abbey, whose monks played as important a part in early Wight history as did those of Spanish missions in California. Coming from France less than a century after William the Conqueror, they tilled the soil, taught the children, and engaged in many charities.

At first Quarr was Benedictine; then it was taken over by the Cistercians. Their abbot became Warden of Wight, had a voice in government, held ships at his command that were exempt from duty payment.

The lovely Abbey and its stately buildings were destroyed by Henry VIII. The weathered stones were later purchased by a Southampton man for building material.



Photograph by W. Robert Moure

STURDY HORSES ARE BRED FOR LONG HAULS AND STRONG PULLS

A visitor once remarked that The Island had produced no famous breeds, but he was thinking of racing steeds. Wight horses may be found on the streets of Liverpool and other mainland cities where steep hills and narrow streets still enable animals of heavy frame and muscular legs to compete with the motor lorry.

Strange stories arose about the ruins stories of an underground passage entered through a gate of gold, and of ghostly guardians of the golden casket where reposed the wife of Henry II after she was imprisoned there.

The new church, looming unexpectedly among the meadows and clumps of trees, gives the visitor a start because of its modernistic aspect. It is as if one came upon a Dutch town hall planted in this rolling English countryside. It is not surprising, therefore, to learn that it was designed by the same monk-architect who planned the monastery at Oosterhout, in the Netherlands.

THE SPELL OF ANCIENT DAYS

An hour's easy walk south of Ryde is "Ye Kynge's Towne of Brading," where beaches and bathing machines, piers and yachts, seem very far away. Yet along Brading's high and dry High Street—Main Street is High Street in many Wight towns—ships once sailed under the eaves of the timbered buildings, and one might pick from

a score of shipmasters to take a cargo into the most distant port.

Brading recalls the days when towns were set far up The Island's meager rivers, or well back in some arm of the sea, as a protection against invasion or pirate raids. Yet the inhabitants, expert in their knowledge of tides and treacherous channels, could put out to salt water to fish or trade.

Long ago silt blocked Brading's harbor, and now dikes have thrust the sea some two miles from its center. We climbed a steep hill to the church, oldest in The Island, past doorways of half-timbered houses built flush with the street, some overhanging it, as if engaged in confidential exchange of medieval gossip.

The church is mentioned in Domesday Book; there is evidence that it was founded by St. Wilfrid in 704. In its chapel is buried Sir John Oglander, who was garnering his salty chronicles of The Island while the Pilgrims were struggling to survive at Plymouth and Weymouth and the early Maryland settlers were putting forth from Cowes to St. Marys. The seat of the Oglan-



Photograph by W. Robert Moure

WIND-BLOWN TREES FORM A NATURAL ARCH ON BLACKGANG ROAD

The marine drive from Chale to Freshwater dives beneath such leafy tunnels, emerges upon the edge of sheer cliffs, and often threads among the rock shelves of this most rugged part of The Island (see text, page 32). These cliffs attract many birds—cormorants, herring gulls, and puffins. Grouse, pheasant, and partridge appear on menus at the inns.

der family was, and is, Nunwell, on Brading Down. Its founder came over with William the Conqueror; and an Oglander was at Nunwell in the reign of Henry I (page 23).

Preserved in a house near the church are the village stocks, and one may decipher from the Town Book, with its entries dating back to 1551, the offenses for which citizens were punished in these stocks.

PRICE FIXING IN 1593

"We present the wife of John Scarvell for drawing blood from the bailey Beale," reads one entry. How old, we thought, are some of the "new" ideas, as we read of a price being fixed for butcher's meat, and the fines imposed for selling at a higher price. That was in 1593.

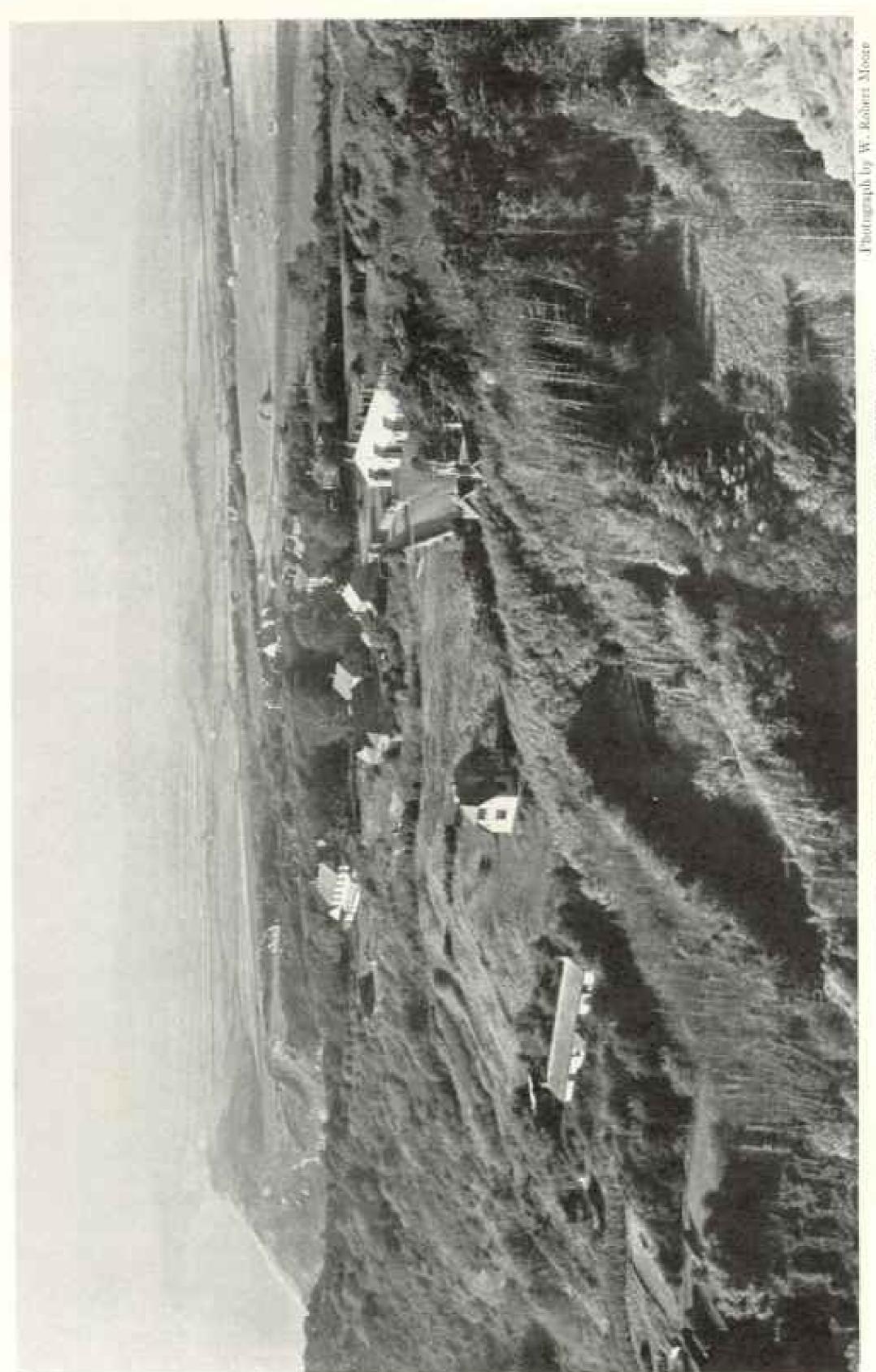
Regulations that we would call "blue laws" were plentiful. On and after a certain date "all craftsmen and tradesmen" were enjoined from opening their windows "on any Sundays or holidays after the bell hath rong the second peale to service." In 1755 a fine of sevenpence was provided "for all those who hang clothes in the Churchyard." And the town fathers record, "We present John Waggs's maid servant for gathering of acorns in Beaper on the Sabboath Day in time of Divine Service. 1603."

Still to be seen, too, is the large bull ring, souvenir of the days when bull-baiting was a national pastime. The Island governor annually contributed five guineas to buy the bull, which, after baiting, was given to the poor. The mayor and other town officials attended in regalia, with mace-bearers and constables, and a beribboned dog, known as the mayor's dog, was unleashed for the attack.

A CACHE OF ROMAN SAFETY PINS

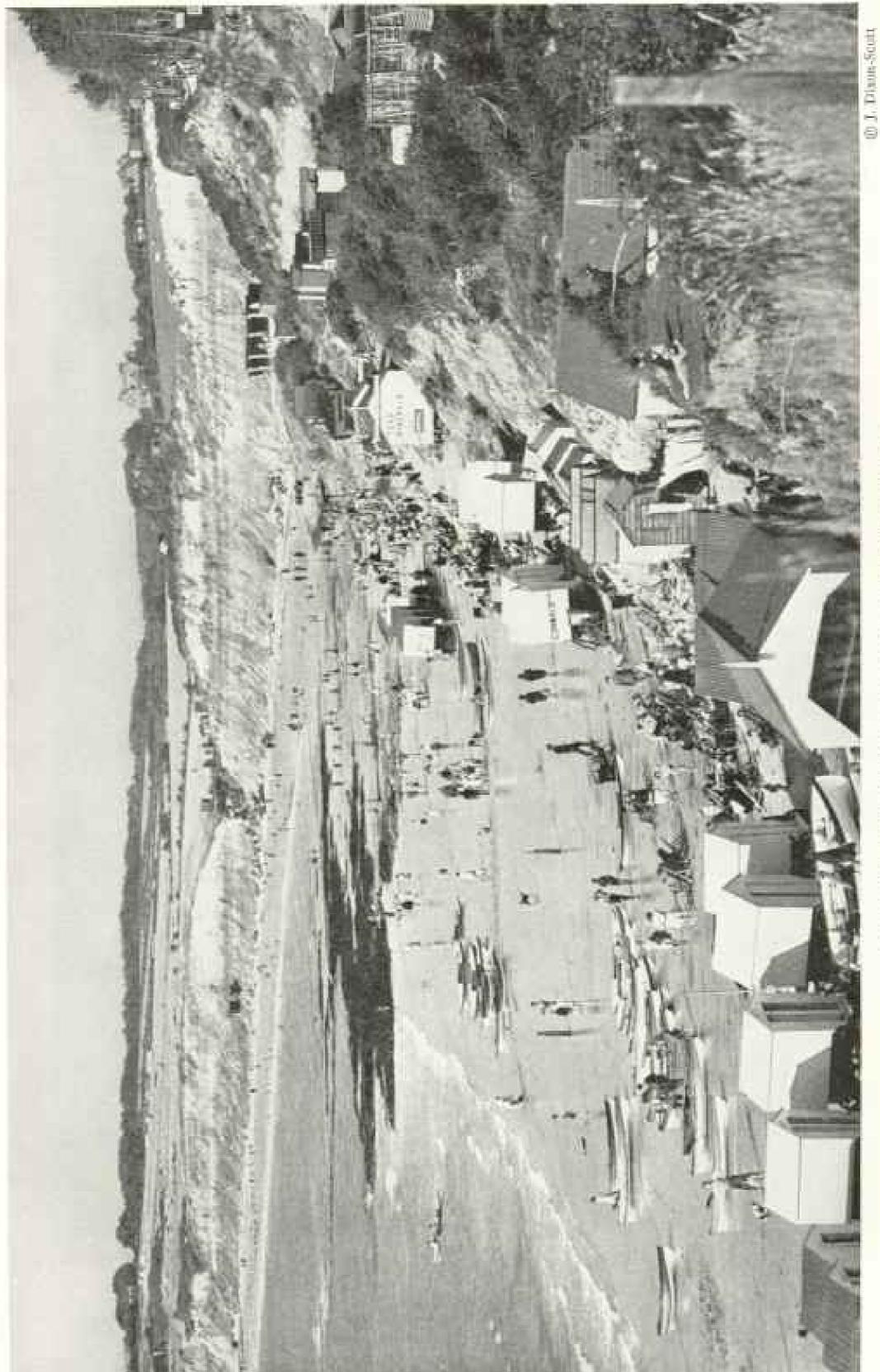
Should one wish to turn back the pages of more centuries, he has only a short walk to Yarbridge, where the ruins of a Roman villa recall the era when Cornwall tin was shipped from Vectis, as Suetonius, biographer of the Caesars, calls The Wight, to the plumbers of Rome.

He must have been a luxurious colonist, this forgotten Roman, for he had a 12-room house, with tessellated pavements wherein



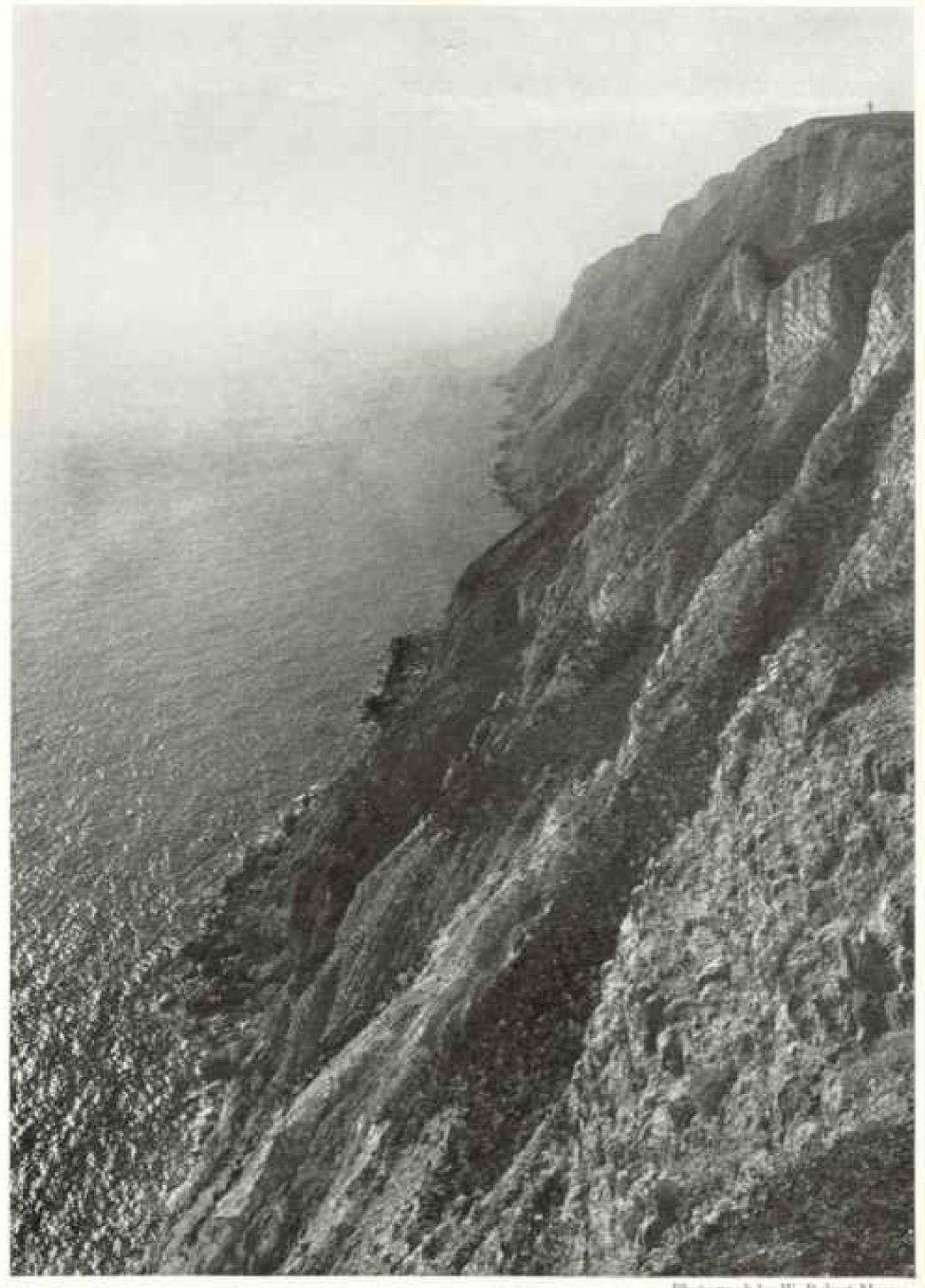
WHERE THE WIGHT'S WILDEST COAST BATTLES WITH THE ROUGHEST SEAS

At Blackman, rocky beadlands war with tempestuous storms around Chale Bay. The defiant cliffs rise nearly 500 feet, affording a clear-day view from The Needles to mainland Dorset, while hurtling streams have carved out storp Blackgang Chine, where sheer bare rocks and the elements conquer any vegetation such as that in Shankin's chasm (see text, page 31).



ON COLWELL BEACH THE BATHING MACHINE SURVIVES

This sheltered cove maintains the conservative tradition that one done a bathing suit for swimming, not for sun tan. The sign "Minerals" refers to the soft drinks which our New England resorts advertise as "tonics" and other places call "soda pop."



Photograph by W. Robert Moore

TENNYSON'S GENTLE VERSE IS COMMEMORATED ON THIS RUGGED CLIFF

The precipitous coast around Freshwater Bay is the dread of mariners and the delight of climbers. The lofty cross marks the terminus of the poet's favorite walk when he lived at Farringford, near Freshwater. This has been called the best-known seascape of The Island because Lord Tennyson entertained so extensively and brought many literary and scientific guests from all over Europe, breathless, to this point.

figures of a monkey, a fox, and a peacock still are discernible. Exploration of the ruins has disclosed a bracelet and earrings, fragments of wall frescoes, Roman nails of the kind used in the Crucifixion, the inevitable hot bath, and some safety pins resembling those one might buy now in any English "sixpence and three," equivalent of our "five and ten."

Walking west from Brading, we faced stiff breezes on the Ashey and Arreton sectors of the downs, where, looking toward the sea, the cliffs sometimes concealed the surface of the ocean, but gave us glimpses of huge liners that had all the appearance of sailing through the countryside.

THE ISLAND'S ONLY "LEVEL MILE"

Then we made our way east from Brading and found, sheltered among the cliffs, the lovely seaside village of Bembridge, which the world seems to have passed by, possibly because some of its neat little streets, threading among rose-grown cottages and their flower gardens, are too narrow for sight-seeing automobiles (see page 19).

The town lies along the embankment, "the only level mile on The Island," which has severed Brading Harbor from its name town, and this situation gives it the aspect of "Little Holland,"

The camera, better than words, can portray the bold beauty of the Foreland, the majestic curvature of Whitecliff Bay, and the crumbling promontory of Culver Cliff, where the downs bare their chalky face to the sea.

Very often the encroaching tides have carved under the steep cliffs until they lean out, like the sagging old houses in Brading and Shanklin, and walking too near their edge is precarious. My photographer friend thought I was overanxious when I remonstrated with him for standing so near the edge, in his zeal for views of the cliff sides; but he was sporting enough to send me a newspaper clipping, after my return, telling how huge blocks of these cliff tops had been undermined and tumbled down several hundred feet into the ocean.

A SIX-MILE LONG SOLARIUM

"Back of The Island," as the southeastern corner is locally known, such subsidence on a large scale has produced the Undercliff, where ages ago the sea and the frost, together with numerous springs, toppled over the cliff top for some six miles, forming a benchlike secondary cliff—a Nature-made solarium, where one may hike, climb, or loaf in the sun.

The island springs have cut deep fissures through the cliffs; two of the most famous of these are Blackgang Chine and Shanklin Chine (see illustrations, pages 13 and 28). The latter is especially beautiful because its sheer sides are tapestried with ferns and its stream leaps over a cascade.

Near the entrance to Shanklin Chine the American visitor finds a reminder of home— a graceful fountain with a shield bearing the English and American flags and lines written by Longfellow when he visited "leafy Shanklin" in 1868. But the cliffside town's principal literary association is with Keats, who, during many happy months there, wrote "Lamia," which publishers have such a taste for binding in small volumes as gift editions.

Perched high on the cliff is Keats Green, which is reached by a long flight of steps from the Esplanade, or one may take the outdoor lift upon which, for reasons unexplained, the fare is one penny down, but twopence up.

RELICS OF WINDOW-TAX TIMES

In spite of those who seek the shelter of its cove behind the downs and at the edge of the Undercliff, Shanklin's "old town" retains its quaint charm. Perhaps in admonition of the gay bathing suits and sport clothes of its feminine visitors, its church displays a Bible verse, just under the tax notices, which warns: "The woman shall not wear that which pertaineth unto a man... for all that do so are abomination unto the Lord thy God."

Many of its houses have clay walls 16 or 18 inches thick, some windows are still barricaded with stone from the days of the window tax, and half curtains with scalloped edges give room for interior window boxes of salvia, fuchsias, and geraniums. In many yards are the Michaelmas daisies which thrive here.

"Isn't it damp under those thatched roofs?" I asked one friendly resident.

"Oh, no," he told me. "It is warmer in winter, cooler in summer, and dry all the time. They have to be renewed every few years; but at that many more people would have them if the fire laws did not forbid putting them on new houses."

All around Shanklin are fine old manor houses—their architecture and annals are a



Photograph by W. Robert Monte

FIGHTING COCKS INN RECALLS A FAVORITE SPORT

A barn near nere, on Hale Common, was a favorite rendezvous for the frays. The Island sent its quota to the All England matches at Westminster. Road signs direct the occasional motorists and the numerous cyclists in minute detail. There is one farther along this highway which proclaims, "To five houses and Newport."

story in themselves—their history weaving into that of The Island and frequently merging into high events in London.

One of them, Landguard Manor, now a vacation lodge, has a homely touch of the family life of the island clans. It has a graveyard where the children buried their pets and for which the youngsters wrote the epitaphs. One tombstone relates:

"George was a pony, merry as a grig,"
Mct with his death from the shaft of a gig."

Joan, a beloved donkey, is made to say:

"I've run my ruce, without diagrace, Like others of my kind, And so, alas, are many left behind."

A MINIATURE ATLANTIC CITY

Between Shanklin and the aforementioned Undercliff is Wight's miniature Atlantic City, Ventnor, and its High Street is one of the highest and most circuitous of The Island. Long rows of the boxlike bathing machines, painted in many colors and odd designs, and children riding ponies on the hard sand, give its beach a sprightly aspect.

On the southernmost tip of The Island is one of the world's famous lighthouses, St. Catherine's, its powerful rays, visible on clear days from French shores, attesting the dangers of Chale Bay—a Cape Hatterns of southern England.

Since 300 years before Jamestown was settled, a light has shone there; originally a priest was in charge, who lived in a hermitage close by.

THE PLACE THAT TENNYSON LOVED

To see Wight one must be willing to walk, for that is the only way to view the spacious spectacles from its downs and cliff tops. But at Chale one may take an automobile and ride for ten thrilling miles along one of the most rugged and lofty coasts of England. Everywhere it is cleft by ravines and glens, cut under by the sea, and frequently hollowed out into water-side caverns.

At Freshwater Bay one comes upon the shrine of another poet, Tennyson. Near by



Central Agraphoto Co.

THE NEEDLES TAKE A LAST STITCH AS THE ISLAND BACKBONE IS FRACTURED BY THE SEA

The chalk uplands extend across the length of Wight to Culver Cliff and form the downs, which, when not exposed, are carpeted with gorse, heather, and scrub which will grow in shallow soil. These formations show how The Isle was severed from the mainland, and how England was cut off from the Continent. Here the "gentlemen adventurers" of the Ark and the Dove said farewell to their homeland as they sailed to settle Maryland.

is Farringford, where he wrote "Enoch Ar- as they passed from sight of their homeden" and "Maud," and "on the ridge of a land to found the New World State of noble down," now Tennyson's Down, stands Maryland.* the conspicuous Cross, at the point to which he climbed every fair day. It was raised, the inscription relates, in memory of him and as a beacon to sailors, "by friends in England and America" (see illustrations, pages 24 and 30).

West of Freshwater is iridescent Alum Bay, where the changing sunlight paints amazing delicate colors on the cliffs and the rocky outposts of the downs, The Needles, which protrude from the choppy waters like the gaunt fingers of a sinking giant.

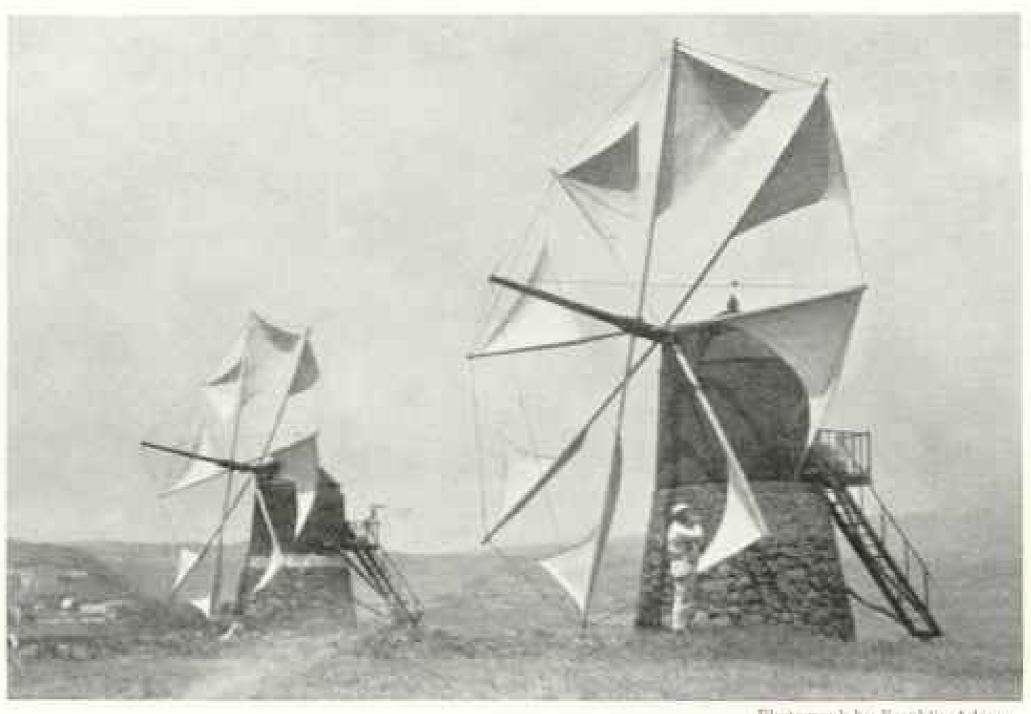
Here it was that the "gentlemen adventurers" of the Ark and the Dove, on a historic day of November, 1633, fired a salvo

* See "Maryland Pilgrimage: Visits to Hallowed Shrines Recall the Major Role Played by This Prosperous State in the Development of Popular Government in America," by Gilbert Grosvenor, in the National Geographic Magazine, February, 1927.

FATHER WHITE'S NOTE ON THE NEEDLES

Father White, teacher of the Indian School which fostered venerable Georgetown University, in Washington, tells in his famous "Narrative" how the tiny ships, after putting to sea from Cowes, "sailed past a number of rocks near the end of the Isle of Wight, which from their shape are called The Needles. These are also a terror to sailors on account of the double tide of the sea, which whirls away the ships, dashing them against the rocks on one side, or the neighboring shore on the other."

A son of Maryland who now visits the Isle of Wight can but ponder that the founders brought with them some of that spirit of liberty and individualism of The Island people which survives in the name and temper of his Free State of to-day.



Photograph by Franklio Adams:

OCEAN WINDS ARE HARNESSED TO GRIND THE GRAIN OF THE AZORES

When the canvas sails are set and the long windmill arms are turning, the miller blows a farcarrying blast on a conch to call his customers. They bring their mains or wheat and pay either in cash or in kind. The upper part of a Fayal mill turns on its stone base so that the wings may be set at the most efficient angle.



Photograph by Wilhelm Tobien

WOODEN WHEELS SING A DISCORDANT DUET

Primitive, creaking Azorian vehicles, "singing carts," are being replaced by motor trucks, but many are still in use among the farmers. The boy with the long stick, which he uses as a whip, is glad to pose for the photographer and rest his ears.

EUROPEAN OUTPOST: THE AZORES

BY HARRIET CHALMERS ADAMS

AVERON OF "MADERA THE PARRICENT," "AN ALTITUDINAL JOURNAL THROUGH POSTUGAL," "MADERA OUT-OF DOORS," BOY, 10 THE NATIONAL GROGERATURE MAGRITURE

A LITTLE more than 1,000 statute miles from the European mainland and about 1,300 miles from Newfoundland, in latitude a little north of Lisbon, a little south of New York, lies the most westerly of the nine Azorian islands.

Fast steamers from New York reach Ponta Delgada, metropolis of the Azores, in five and a half days. Seaplanes have flown across from Newfoundland between dawn and dusk. Three hospitable harbors in this friendly archipelago await the coming of commercial seaplanes, which will form another link between the New World and the Old (see page 54).

Closely allied as they are with Portugal, of which they form an integral part politically, these fertile green islands, with their lush pastures and mist-wreathed mountains, long ago turned their faces toward the West, sending their frugal, industrious sons to the United States, where, before 1929, there was probably one Azorian to every two left at home. Most of them are found in Massachusetts, Rhode Island, and California.

More than once on the streets of Azorian towns I was approached by a stranger who doffed his hat and politely inquired:

"You are an American?"

When I assented, my new acquaintance informed me he voted in New England or California, but was born in the Azores; was "back home to see the old folks," or "here until times are better in the States."

From a rounded hilltop back of a rainbow-tinted town, I looked past oblong fields bordered by high stone walls of dark-gray lava to tile-roofed, many-windowed buildings stretching between gardens and parks along the curving coast. It was springtime and all about was the trilling, piping, and fluting of birds. In the fields barefoot men sang as they toiled. Far out at sea, blue as the sky on this calm May day, a sailing ship winged toward the shore. So from the east came the first adventurous sail to these then uninhabited isles; but whether it was Carthaginian, Moorish-Arab, or Iberian, we are not sure.

In the 15th century the valiant oceanmapping Portuguese colonized these islands and, save for 60 years of Spanish rule, have governed them ever since,

The islands, of volcanic origin, stretch for about 375 miles from northwest to south-east, in three severed groups with clear channels between. Corvo, smallest and by far the most primitive, lies farthest north; Flores, beautiful and well watered, farthest west (see map, page 36).

To the southeast, across a tempestuous stretch of winter sea, is the central group: Fayal, seat of the oceanic cable station; Pico, with its majestic conical mountain; São Jorge, with its rich pastures, exporting excellent cheese; Graciosa, with "more wine than water;" Terceira, most interesting historically, preserver of old customs.

Another wide channel and we reach São Miguel, which the British and Americans call St. Michael's, largest and most important of the group, with Ponta Delgada, chief city of the archipelago (see Color Plate I); and, again to the south, Santa Maria, first to be discovered and colonized.

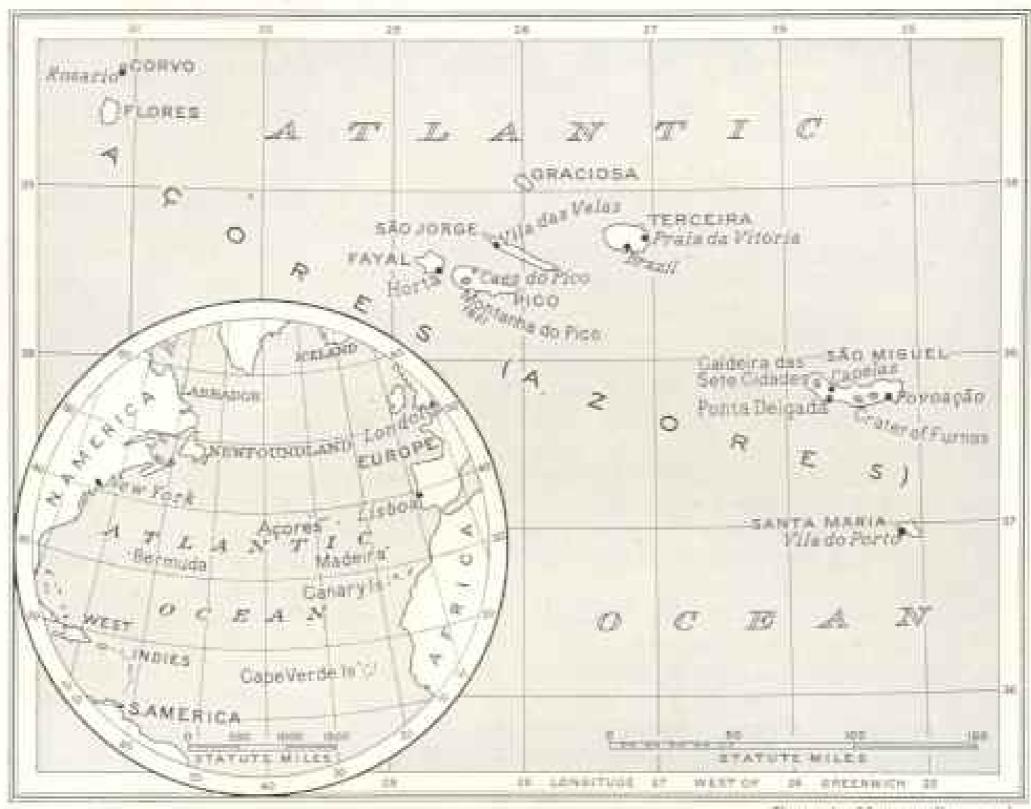
"Islands Adjacent" is Portugal's official designation of Madeira and the Azores, the last named, as one wit has remarked, being adjacent only to one another. In Portuguese the name is Açores, which signifies "hawks."

MANY OCEAN LINERS PASS

The wide expanse of ocean on every side and the force of the encompassing winds tend to give the newcomer a feeling of isolation. This lessens as the weeks pass, in spite of the provoking sight of many big ocean liners, which steam past the Azorian capital with only the blast of the siren as a nod of recognition.

Portuguese mail-boats, leaving Lisbon twice each month, come by way of Funchal, Madeira, and reach Ponta Delgada in four days. One of these ships goes only as far north as Fayal; the other goes beyond Fayal to Flores, touching six times a year at lonely, storm-harassed little Corvo. The round trip from Ponta Delgada to the northern islands can be made in one week.

Motorboats and sailing vessels also ply, when weather permits, between insular ports.



Drawn by Newman Burmbrad

GEOGRAPHY CAST THE AZORES FOR A THRILLING ROLE IN WORLD AFFAIRS

The nine little Portuguese islands, linking the hemispheres, serve as a natural halfway station for transatlantic flyers and one, Fayal, is a clearing house for cablegrams. Self-sufficient and industrious, each small dot of land has a charm and individuality all its own, from remote Corvo and Flores to Santa Maria, where Columbus stopped in 1493 with the news of his discovery.

tween Ponta Delgada, London, and Hamburg. Italian, French, and Greek transatlantic liners stop at the Azorian capital. Ponta Delgada and Horta, with their adequate artificial breakwaters, are havens for ships in need of fuel, provisions, or repairs. Cruising ships crossing the North Atlantic now and then include the Azores on their itinerary.

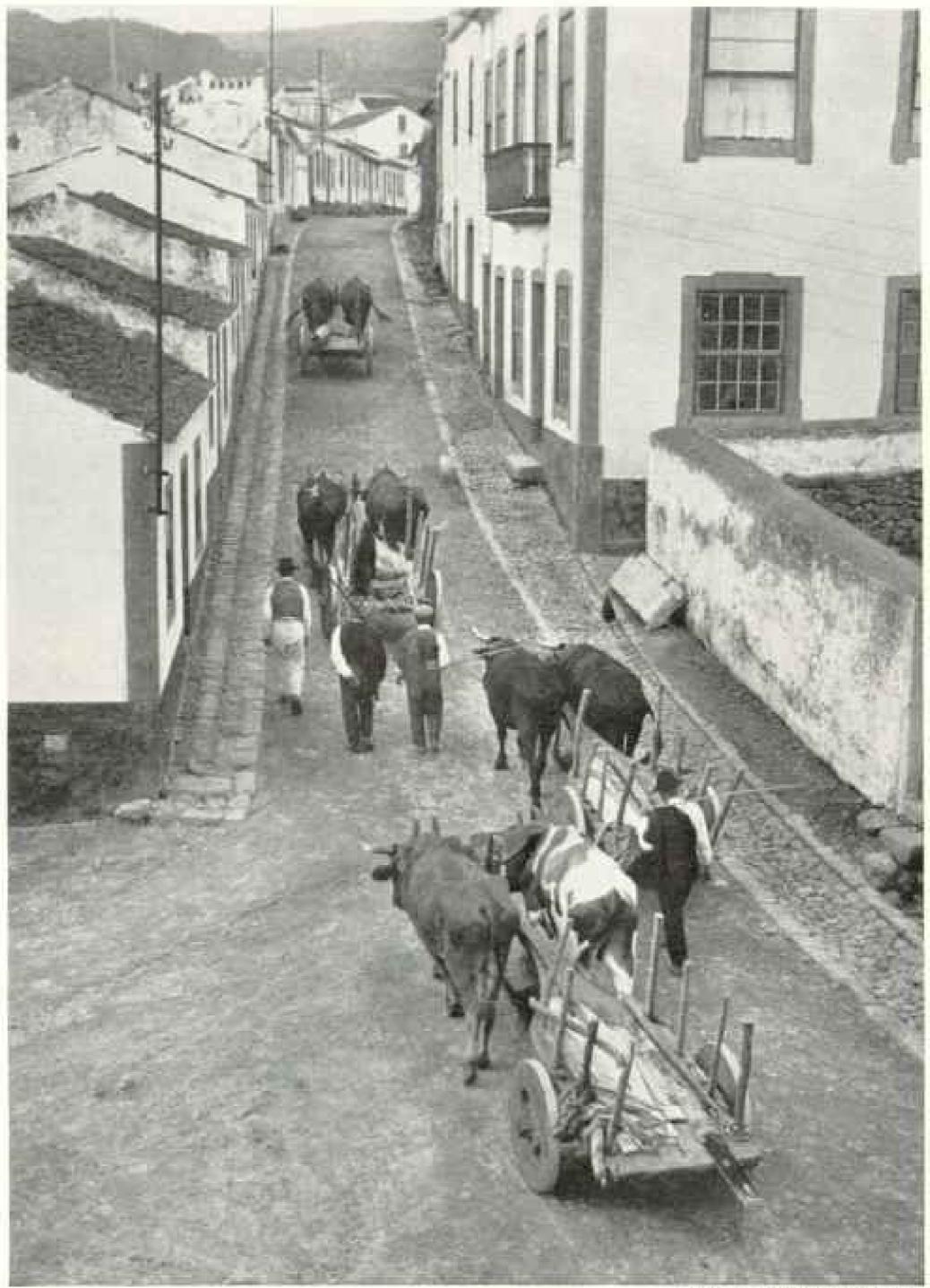
To the quarter of a million Azorians their temperate, agriculturally productive archipelago is a complete little world in itself. For their food supply these islanders are practically independent of lands beyond. They produce their own cereals, vegetables, fruit, meat, milk, butter, cheese, and eggs. They make sugar from the beet, spirits from the sweet potato, press their own grapes into wine, "roll their own" tobacco, "curl their own" tea. Their seas abound in fish.

Their buildings are constructed from the

There is a fruit and passenger line of volcanic basalt of the islands. Furniture small ships, with semimonthly service be- is made from native woods. They manufacture linen from home-grown flax and woolen garments from sheep's wool. Luxuries are imported, chiefly from the Portuguese mainland; but, should every ship sailing these seas fail to call at the "Western Islands," the Azorians could survive.

THE FESTIVAL OF SANT' CRIST'

On our second visit to the archipelago we reached Ponta Delgada in early May, in time for the chief religious festival of the year, in honor of Santo Cristo dos Milagres (Our Lord of the Miracles), the devoutly worshiped image called locally "Sant' Crist'." This image, revered for nearly 400 years, is remarkable for the number of precious stones with which it is adorned. When a native of São Miguel prospers in the New World, a portion of his first savings is usually sent to his beloved Sant' Crist.



Photograph by Wilhelm Tubien

BACK TO THE FARM GO THE "SINGING CARTS"

They get their flattering name from the squeaky sound of wooden wheels revolving on axles also of wood. When the crude vehicles are bound for market with heavy loads the friction sometimes sets them after. Now empty, they pass through the outskirts of Angra do Heroismo, whose main streets are much wider.



Photograph from A. T. Hasherle

DANCERS STEP TO A LIVELY NATIVE TUNE

Even the shoeless join in the merrymaking at the religious festival of Santo Cristo, on São Miguel. Men and women wind in and out, after the manner of the old-fashioned American square dance, to the music of violite, guitars, and accordions.



Photograph by Wilhelm Tobien

EACH PINEAPPLE PLANT GETS AN INDIVIDUAL DRINK OF WATER

Growers in the Azores find it pays to pamper the fruit, although production cost is high. Hothouse grown, the luscious "pines" destined for European tables attain large size and uniformity (see illustration, page 63, and text, page 40).

The festival began on a Thursday with the arrival in town of farmers bringing 50 head of cattle to be slaughtered as meat for the poor. Banners waved; rockets shot skyward in broad daylight; a band

played.

On the following day the meat, with bread, was blessed and distributed. On Saturday the sacred image was conveyed with ceremony from its home in an old convent to the Church of Esperança (Hope), next door. That night thousands knelt before it. Not only from rural districts of São Miguel, but from the neighboring island of Santa Maria, worshipers flocked to the capital.

The façade of the church glowed with electric lights, adjacent buildings on the public square were illuminated, and a line of flaming arches stretched across the streets. There was a band concert, with fireworks and skyrockets, the latter being closely associated with reli-

gious ceremonies in all Portuguese lands. On Sunday afternoon came the procession, when the image, accompanied by the clergy and hundreds of laymen, was conveyed through the city and back to the convent. Men and women of distinction, of the middle class, of the peasantry, all participated. Embroidered hangings draped the balconies. The streets were strewn with incenso (Pittosporum) leaves, aromatic fennel, and fresh blossoms. The flower carpet below the balcony on which I stood was of red camellias. All knelt as the image, under its canopy of native-made feather flowers, was borne past.

I was disappointed that so few old native



Photograph by Wilhelm Tobien

TWO WALKING "COAL SCUTTLES" STOP TO TALK

All-enveloping and funereal, the traditional "cape and hood," once worn to shield women from the eyes of aliens, may still be seen occasionally on Ponta Delgada's streets. The huge stiffened hoods reminded the author of old-fashioned coal hods.

> costumes were to be seen on the streets during these festival days, but glad that one, at least, still survives. It is the capote e capello, distinctly Azorian, the woman's long, dark-blue cloth cape, circular in shape, with a large hood of the same material, resembling a coal scuttle. It is amusing to see two capotes stopping for a friendly gossip. The scuttles meet and only gesticulating hands are visible.

> The shrouding of the woman's head and shoulders is a relic of centuries of Moorish rule on the Iberian Peninsula. This particular garment may be of Flemish origin, brought by early colonists from Flanders. Some Azorians believe it owes its being to

the period when these islands were ruled by Spain. I was shown an old chronicle which relates that women then disguised themselves on the street to escape the notice of the aliens.

When the Portuguese monarchy was restored, the king, wishing to do away with reminders of foreign supremacy, issued an edict that any woman so muffled should be fined, continued infraction of the law being punished by imprisonment and even by exile to Brazil or Africa. In spite of two centuries of persecution, the all-enveloping garment survived.

The hood is not always the same, being larger on the islands of Santa Maria and São Jorge, more stiffened with buckram and whalebones in Fayal. The young moderns scorn it (see Color Plate VIII); but, conservative, convenient, protective, and long-lived, it is still worn by some of the older women, especially for early Mass. If the wearer happens to see somebody on the street whom she wishes to avoid, presto! the hood is pulled farther forward and she is within her own fortress.

The visitor to Ponta Delgada is struck by the high walls of dark lava stone which line the streets back of the business section and continue on outlying country roads. The pedestrian is often hemmed in by these stone barriers. I inquired why such formidable inclosures had been built.

"It was in the days when we cultivated the orange so extensively," I was told, "when the St. Michael's orange was famous, before the blight came. These walls protected the trees from the wind; and, again, it was an easy way of getting rid of the stones in the fields."

PINEAPPLES SUPPLANT ORANGES

Excellent oranges are again grown here, but the former British market for them is lost and pineapple culture has become the chief source of wealth, developing São Miguel into an "Isle of Pines" which provides a good part of Europe with practically all its fresh supply of this delicious fruit.

I know the English lady whose father, a skilled horticulturist, came to this island more than eighty years ago to lay out the famous José do Canto Gardens. It was he who brought the first pineapples to his employer's hothouse. Twenty years later the fruit was shipped to England, each pine in its pot selling for two guineas. England and Germany are now the chief consumers

of Azorian pines, France and continental Portugal following (see page 38).

The plant, which is here of the smoothleaved Cayenne variety, is grown under glass, special beds of fermenting heath or some other mountain shrub being provided. All the plants are brought to blossom at the same time by a process of smoking, the value of which was accidentally discovered many years ago when a carpenter, working in one of the pineapple houses, chanced to set fire to a pile of shavings. To the surprise of the grower, the plants, instead of being spoiled, burst into flower. By this method practically all the plants in a hothouse can be marketed at the same time, many months earlier than formerly.

Little glass houses shimmer on emerald slopes in various sections of São Miguel, the exclusive producer of pineapples in this archipelago (see page 63). Wrapped in cellophane or packed in excelsior and crated, the fruit is shipped to the European market by a fleet of three vessels owned by the growers. Last year about 2,000,000 pines, worth half a million dollars, were exported.

TEA DRINKERS FROM EARLY DAYS

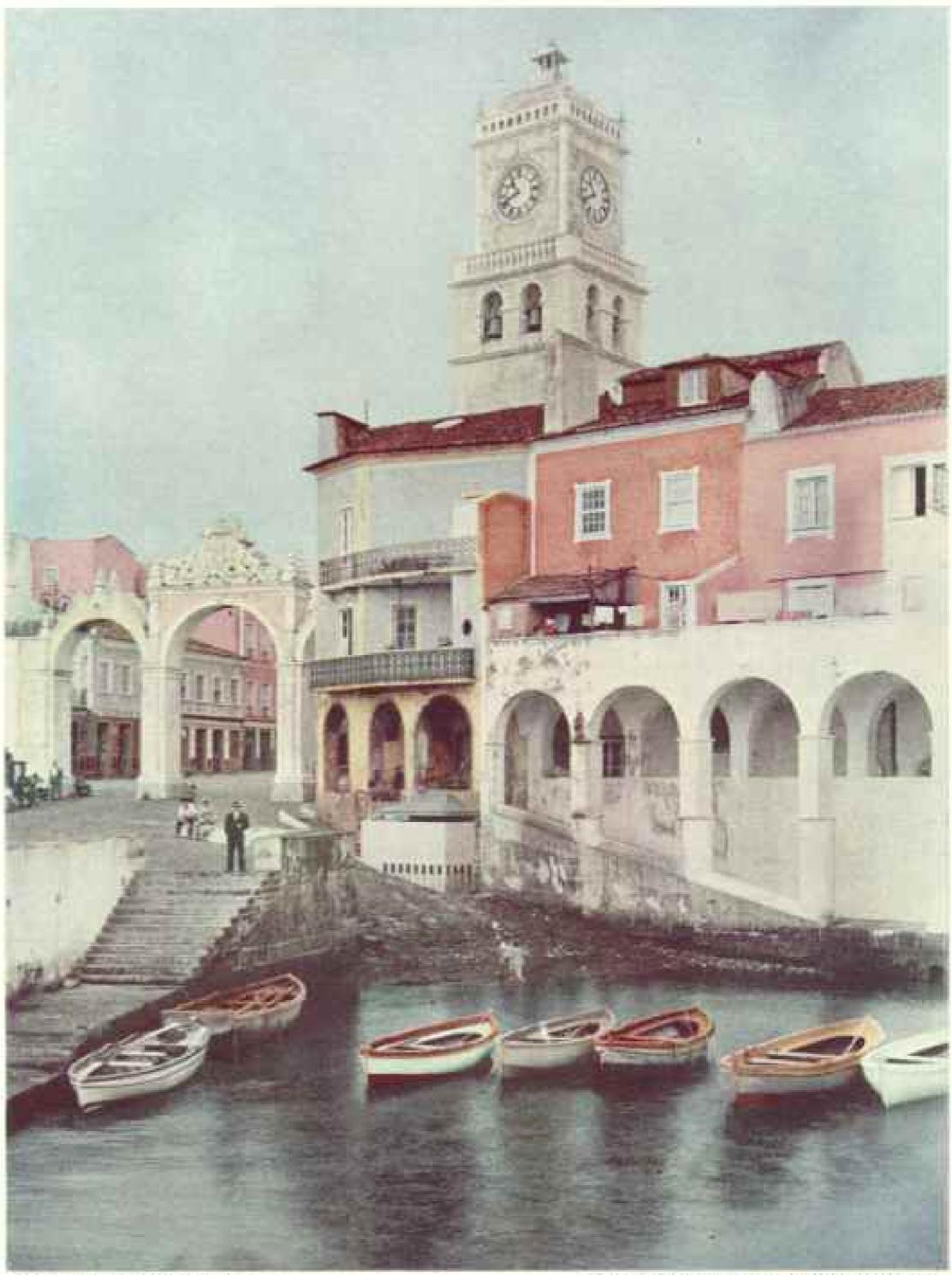
Another exotic industry on this island is the production of black and green tea, which here retains its oriental name, "cha." Ever since they discovered the sea route to India and planted their settlements as far afield as Macao (Macau)," on the coast of China, the Portuguese have been a tea-drinking nation.

There is an old belief that tea is better if it has not crossed the sea. Whether this is true or not, Azorian tea tasted to me much like the Far Eastern variety on its native soil. It is consumed locally and shipped to other parts of Portugal.

A number of Chinese were originally imported as instructors in the tea culture, but now only native labor, chiefly female, is employed. The plantations dot the hill-sides on the northern side of the island, which has greater moisture than the south coast. The stiff little evergreen shrubs stand in precise rows, very foreign in appearance, contrasting strangely with the familiar European flora about them (p. 55).

A motor road parallels the coast of the island, with connecting crossroads, enabling the traveler to see much of beauty and

^{*}See "Macuo, 'Land of Sweet Sadness,' " by Edgar Allen Forbes, in the NATIONAL GEOGRAPHIC MAGAZINE for September, 1932.



@ National Geographic Society

Natural Color Photograph by Wilhelm Toblest

HERE BASED THE AMERICAN FLEET DURING THE WORLD WAR

Far out in the Atlantic, 955 miles west of Portugal, lie these tiny Portuguese islands, the haven of sailors since Elizabethan times. President Franklin D. Roosevelt, then Assistant Secretary of the Navy, inspected the United States ships in Ponta Delgada's artificial harbor, on which face the high arches of the city's gate and the clock tower of Matrix Church. From here in 1919, the American seaplane NC4 began the final leg of the epochal first crossing of the Atlantic by air.

THE NATIONAL GEOGRAPHIC MAGAZINE



LAKES OF SÃO MIGUEL BESPRAK THE VOLCANIC ORIGIN OF THE AZORES

Violent earthquakes have rocked this lovely valley of Furnas. Actually it is a treacherous crater, whose rugged walls cup a turquoise pool. An exhilarating climate, even in summer, and bubbling hot waters have attracted health seekers to the resort for hundreds of years (see Color Plate VII).



D National Geographic Society

Natural Color Photographs by Wilhelm Tobles.

BORTA IS A NERVE CENTER FOR TRANSATLANTIC CABLES

On tiny Fayal Island, six companies, representing five nations, operate in one communications building. One of the largest cable stations in the world, it is a clearing house for a network of 15 undersea lines. Colonel and Mrs. Lindbergh landed here on their round-the-Atlantic survey.

THE AZORES, COMMUNICATIONS HUB OF THE ATLANTIC



THE STOCK MARKET BECOMES ACTIVE ON THE TABLELAND NEAR PURNAS

Lands are owned principally by wealthy proprietors who lease the grazing privileges. In summer, when cattle pasture in the hills, rent is based on herd size; when they feed on lowland fields in winter, charges depend on the area occupied. Long poles, instead of whips, are used in driving cattle.



(3) National Generaphic Society

Natural Color Photographs by Wilhelm Tobien

THE PHOTOGRAPHER'S ARRIVAL HALTS PLAY AROUND THE VILLAGE POUNTAIN

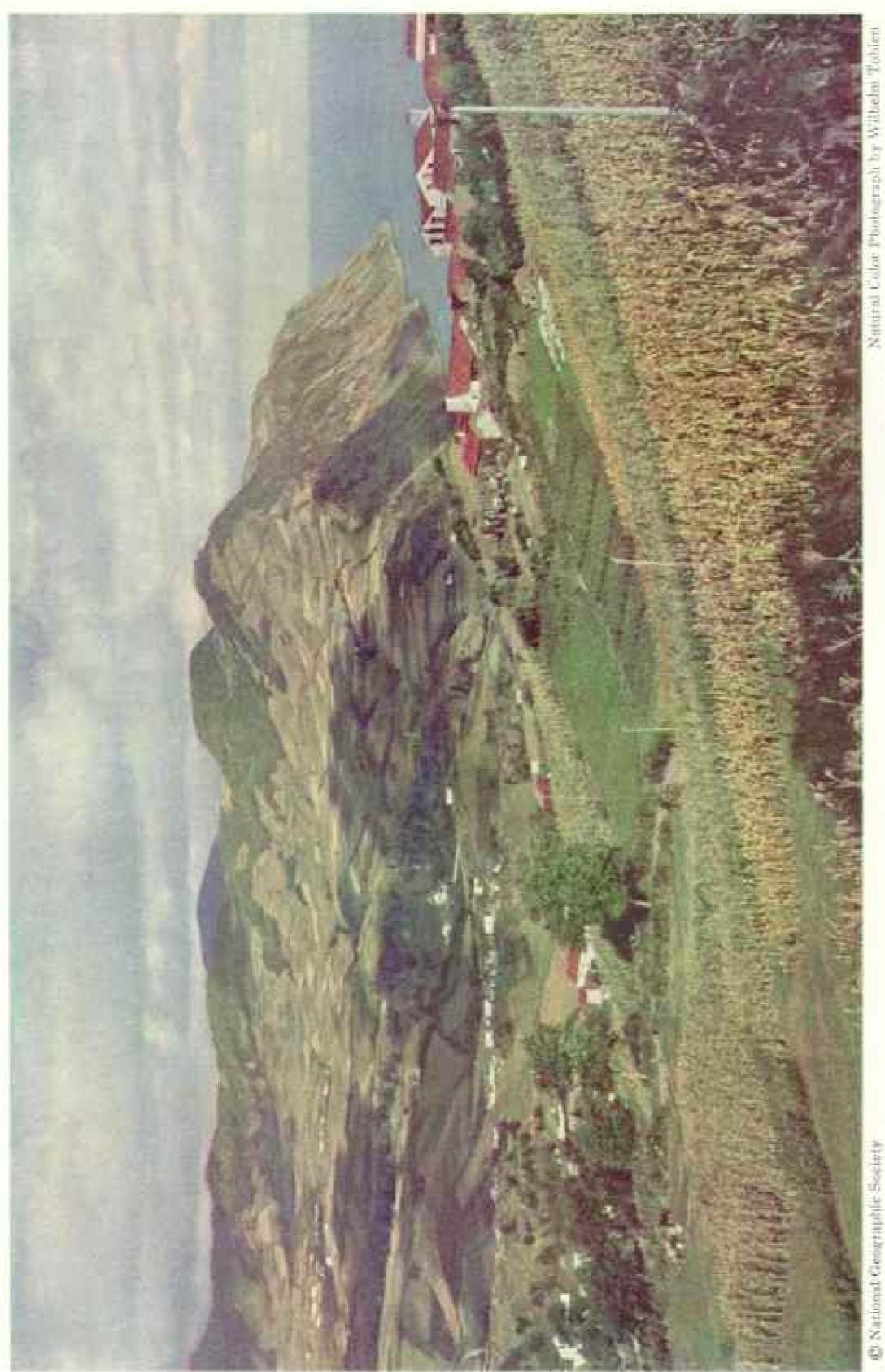
Sete Cidades, home of these healthy youngsters, nestles in the bottom of a volcanic bowl on São Miguel near two adjacent lakes, one emerald green, and the other deep blue. A family water cask fills beneath the spigot.



IV

DOM PEDRO IV WHO CHOSE DETWELL TWO THRONES To continue as first Emperor of Brazil he refinquished regent naurped her rights, Angra do Heroismo, below, A MEMORIAL TO

the sovereignty of Portugal to his young daughter, Maria II. Later the child-queen's uncle and menning Bay of Heroism, commemorates a naval battle in defense of the girl-queen's heritage.



A CENTURY BEFORE COLUMNIS DISCOVERED AMERICA THE AZORES WERE STITLED NEARLY HALF

Povnação is in the richest agricultural area on the most America, flourishes here, as well as citras fruits, potatoes, Africa are found on the island, probably storm-driven castaways from the mainland, or São Miguel's first settlement. fields, corn, an importation from Fortunate were the colonists when they chose this fertile and populous island of the group. In checkerly tobacco, jute, and pineapples. Many birds common to

THE NATIONAL GEOGRAPHIC MAGAZINE



TREASURE GALLEONS OF SPAIN ONCE LAY WHERE THE STEAMER IS MOORED

Proud fleets, newly arrived from the West Indies, assembled here under the sheltering guns of an impregnable castle. Even today, Angra do Heroismo, with its numerous churches and brightly painted houses, keeps alive the spell of its romantic past. On distant Monte Brasil stands the monament to King Dom Pedro IV (see Color Plate IV).



C National Geographic Society

Natural Color Photographs by William Tobien

WOOD IS PRECIOUS IN TERCEIRA

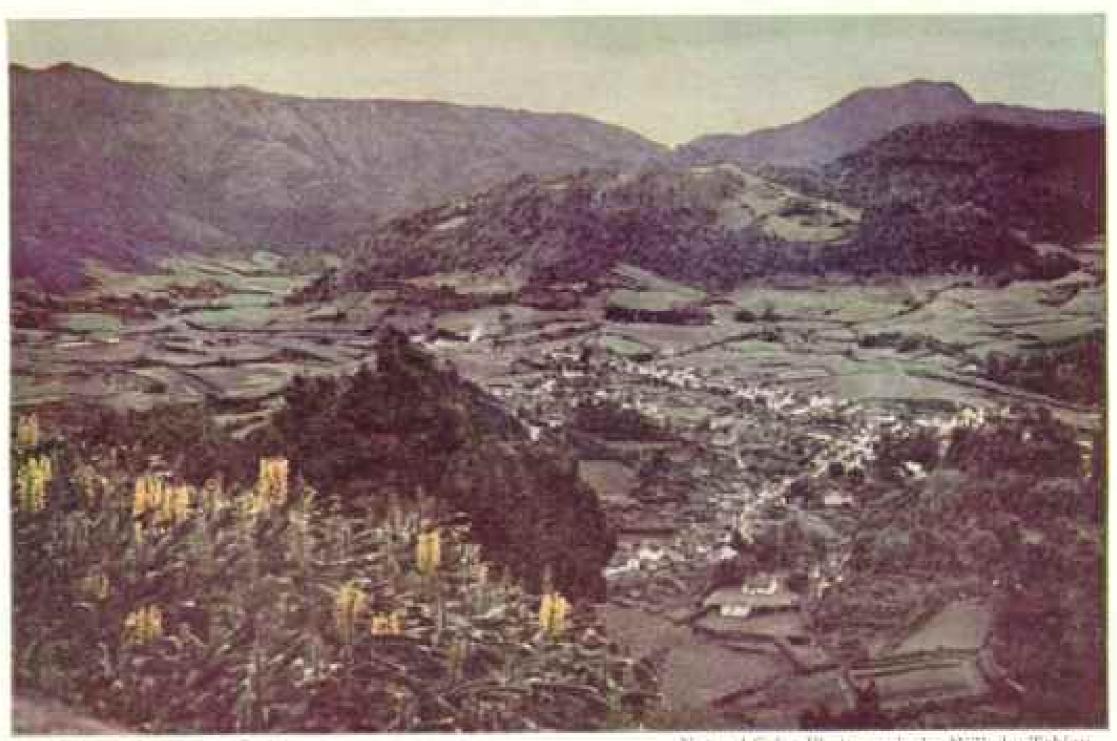
Before colonists came, there were no tall trees in the islands. Now elms, oaks, poplars; pines, and many other large trees are common. Water mills are frequent in the vicinity of Angra do Heroismo.

THE AZORES, COMMUNICATIONS HUB OF THE ATLANTIC



VOLCANGES HELP THE PEOPLE OF FURNAS TO EARN THEIR LIVELIHOOD

To this structure are piped both sulphur and iron waters, hot and cold, from near-by mineral springs. Sufferers from rheumatism and other allments flock to the baths. Once, in 1630, a frightful cruption near here cost the lives of more than 100 natives who were gathering berries and tending their flocks in the woods.



ID National Geographic Society

Natural Color Photographs by Willielm Toblesi

TROPICAL FOLIAGE AND VERDANT FIELDS CARPET THE VALLEY

The white plumes of immaroles rise to the left of the white houses of Furnas. In some places steaming fissures are so hot that the ground around is barren - a contrast to this fertile scene.

THE NATIONAL GEOGRAPHIC MAGAZINE



FINE GRAPES GROW IN THE AZORES' VOLCANIC SOIL

Blight once destroyed many of the islands' prosperous vineyards. Disease-resisting plants were imported from America, and today the wine industry flourishes.



@ National Geographic Society

Natural Color Photographs by Wilhelm Tobien

THE YOUNG WOMEN OF HORTA NOW WEAR MODERN CLOTHES

Disappearing are the wide scuttle-shaped hoods and enveloping capes, formerly striking features of Azorian women's costumes. Some older ladies still cling to the outmoded fashions for special occasions, such as attending church. The islands' teeming population of 253,000 is increasing now that the swift flow of emigration to the United States has been restricted.

interest, even in one day ashore, including trips to the two largest craters.

We motored to the crater of Furnas, a favorite summer resort. On the outskirts of Ponta Delgada we passed carts hauled by strong Spanish mules, a sheep-drawn cart directed by a small boy, and a big shaggy dog, unattended, carrying in its mouth a lunch basket for its master. Such dogs are trained from puppyhood to do the day's work (see pages 51 and 56):

On the country roads were slow-swaying bullock carts, with woven-willow bodies filled with heath for the pineapple houses. Some were of archaic pattern, with solid wheels of the Roman type, their approach heralded by the complaining creaking "song" I had remembered during years of absence from the Azores (pages 34, 37).

It is a deliciously green and restful country. Checkerboard fields, brown and green, alternate with woods filled with songbirds. These islands, like those of the Madeira and Canary groups, are the habitat of the wild canary of greenish-gray hue. Its glad note is one of the pleasantest features of the Azores, where it seems to be more numerous and more vocal than on the islands farther south.

Near every stone cottage stood a corn rick with brownish maize in the husk hung to dry (see page 60). It forms the staple cereal crop of the islands. Fava beans (broad beans) and yams are grown and are leading articles of export. Near one cottage flax was drying, and we passed a factory where linen is manufactured.

A RESORT IN A CHATER

After skirting pine-clad cliffs, the road climbs to a misty, heather-clad tableland; then descends into Furnas valley, shut in by towering green walls. Were it not for the puffs of steam ascending from its many boiling sulphur springs, it would be difficult to believe that this peaceful vale is the crater of a mighty volcano which more than once poured out its molten lava and which still speaks through vents in the hot sulphur-stained crust around the springs (see Plate VII).

It is a beautiful picture from the heights, this quiet, sheltered valley with its long, narrow village meandering like a stream through woods and meadows. The lake, on a raised platform of the crater, lies some distance from the settlement. A few summer villas dot its placid shores (see Plate II).

Prescott, the famed historian, came to Furnas as a young man to visit at the summer home of his grandfather, first American consular officer in São Miguel, who was appointed in 1795 by President Washington.

A new hotel is building not far from the thermal establishment, where sulphur and iron baths are available. Near-by fountains supply various kinds of mineral water, the place being noted for the diversity of its waters and the proximity of hot and cold springs.

One deep, cavelike caldron, belching forth boiling mud and steam, is called "The Mouth of Hell." Its evil appearance and the strong smell of sulphur give the impression that this is really an entrance to the abode of His Satanic Majesty.

We left the crater by the south-coast highway, where hamlets fringe the shore. Stately manorial houses, erected centuries ago, are to be seen throughout the island, usually set on the heights. One such house, built in 1724, was our home during two visits to Ponta Delgada. It is a delightfully romantic old place. The big stone-paved kitchen has a chimney-place which is a room in itself. Standing in it, beside the huge brick hearth, I could look up the wide chimney, which towers above the house, to a patch of blue sky. Such chimneys are a distinctive feature of Azorian houses (p.64).

The upper class of the metropolis leads a pleasant life, quiet as compared with the stress of our American cities. There is a social club where dancing is a favorite pastime; a coliseum seating 2,600; a sports field for football, tennis, croquet, and handball; a baseball park; and an open-air sea pool built in the rocks by the shore.

There are motion pictures twice a week, chiefly from Hollywood. American influence is apparent in the English spoken throughout the Azores. There seems to be a genuine liking for the United States. The Stars and Stripes are in evidence at every festival. During the World War, Ponta Delgada was an American naval base.

Economically self-contained, the Micaelenses are no less independent when it comes to their social pleasures. We attended an amateur show, given in aid of a local charity, consisting of two operettas, one in Portuguese, the other in French. The scenery



Photograph by Toste

FLOWERS CARPET A STREET IN FURNAS VALLEY

At festival time a sacred image is borne along a pavement spread with blossoms. On every hand in the Azores bloom roses, camellias, hydrangeas, lilies, wisterias, begonias, gladioli, and many more. Another island, Flores, gets its name from its floral beauty.

was painted locally, the costumes made in the homes of the young men and women who participated. In their singing, dancing, and acting these young people exhibited amazing talent and poise. In no other land have I seen a more creditable amateur performance, and this on an island in the middle of the ocean visited by few professional companies.

The young folks mingle in crowds, but there is here no such free and easy companionship among them as exists in the United States. The chaperon is still in vogue and "balcony courtship" is carried on with its own prescribed etiquette, the girl leaning over the second-story balcony to talk with her admirer on the street below.

A second memorable trip took us to the finest sight on the island, the crater of Sete Cidades (Seven Cities). The view from the rim is magnificent. The cup-shaped crater is nearly ten miles in circumference and holds, besides a lake with a hamlet on its shore, pastures and cultivated fields and three volcanic cones due to subsequent eruptions.

Owing to varying depths and deposits, the lake, shaped like the figure 8, and sometimes spoken of as two lakes, is vividly green at one end, brilliantly blue at the other.

LINDBERGH FLEW OVER

I wish I could have looked on Sete Cidades that day when the Lindberghs, on their aërial odyssey from Greenland's icy mountains to the steaming jungles of the Amazon, swooped down over its secluded lake.* Their seaplane did not alight, but flew up and away

as magically as it had come. The crater villagers are still marveling! (See page 53.)

There are many among the poor of these islands, who have suffered since money orders have ceased to arrive from Manoel or Antonio, who formerly prospered in Providence or New Bedford. The Azorian assets are a stout heart, a willing hand, a productive soil, and a climate which, though damp and rainy six months of the year, is without extremes of temperature.

Wages are low, but food is cheap. The

* See "Flying Around the North Atlantic," by Anne Morrow Lindbergh and Charles A. Lindbergh, in the National Geographic Magazine for September, 1934.



Photograph by Franklin Adams

TO THE SHEEP THE BOY OWES BOTH HIS RIDE AND HIS CLOTHES

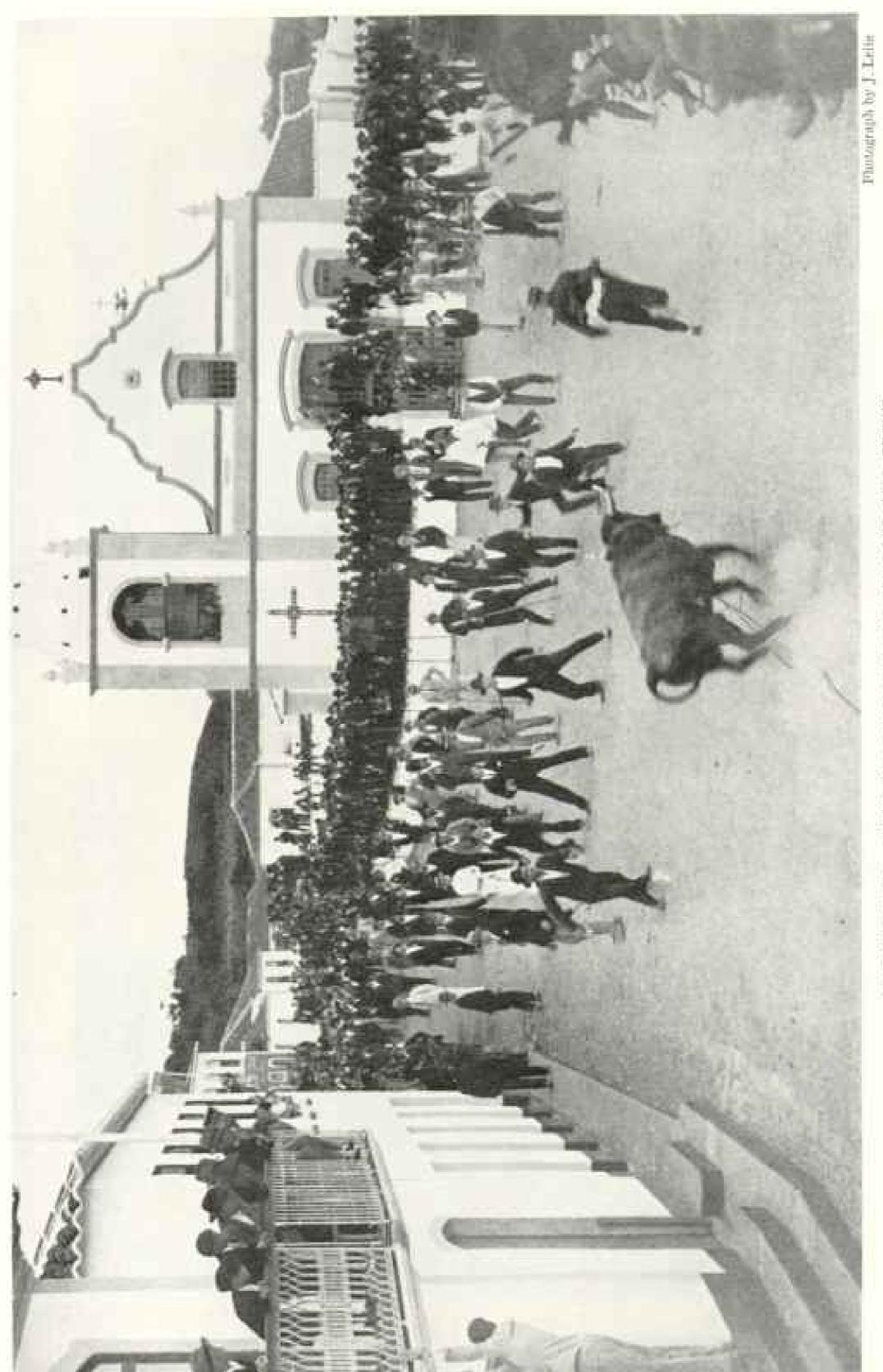
Here on São Miguel the little animals do double duty. From the wool are made the homespun garments of the country people. Harnessed sheep draw small carts for light deliveries.



Photograph by Wilbelm Toblen

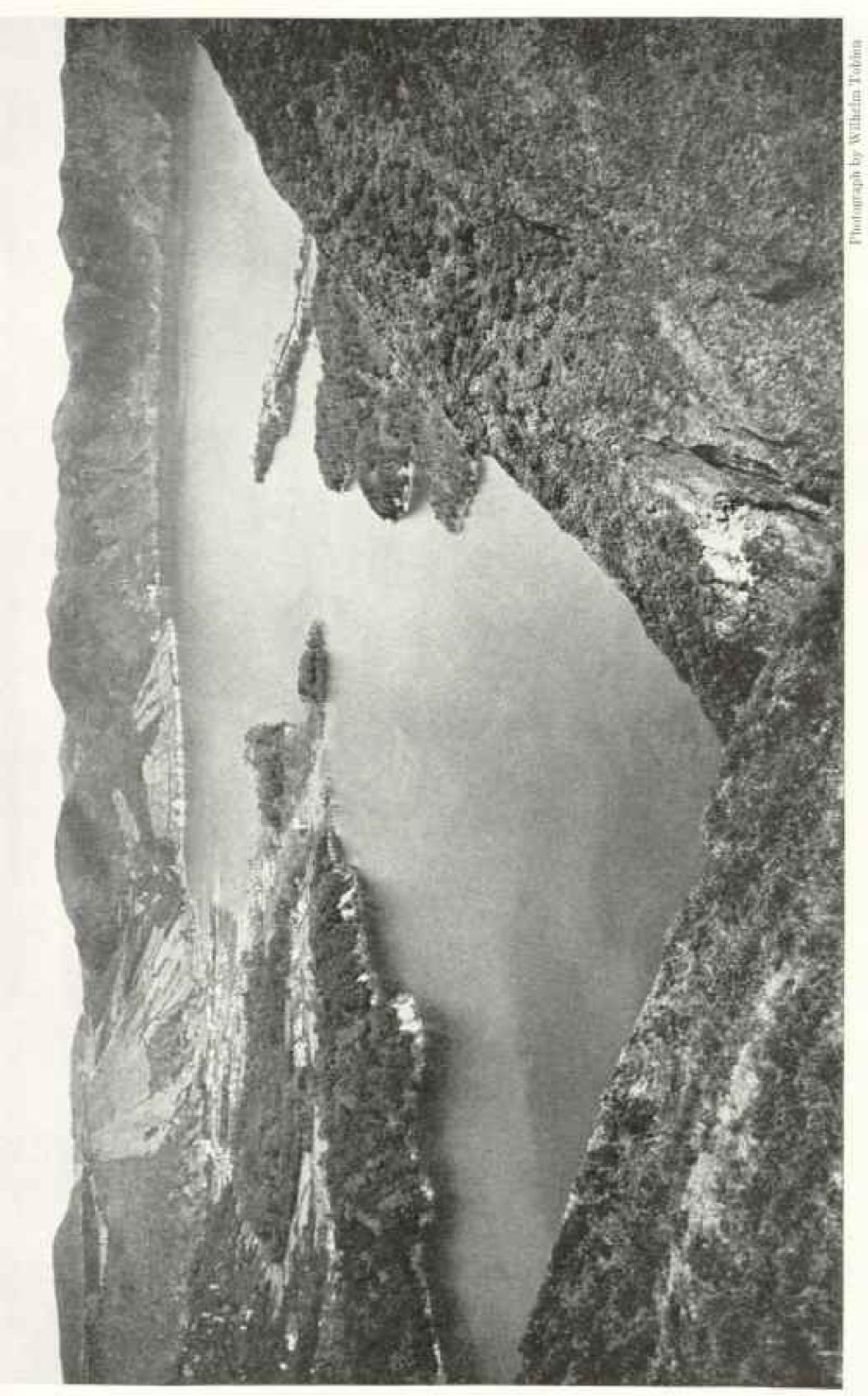
WINE BARRELS RIDE UNDER THE CART, NOT IN IT

Thus it is necessary to lift them only a few inches instead of several feet. Such processions are familiar sights in Ponta Delgada streets, for considerable wine is made on São Miguel Island. Highly popular is a red variety which contains little alcohol and tastes richly of grapes.



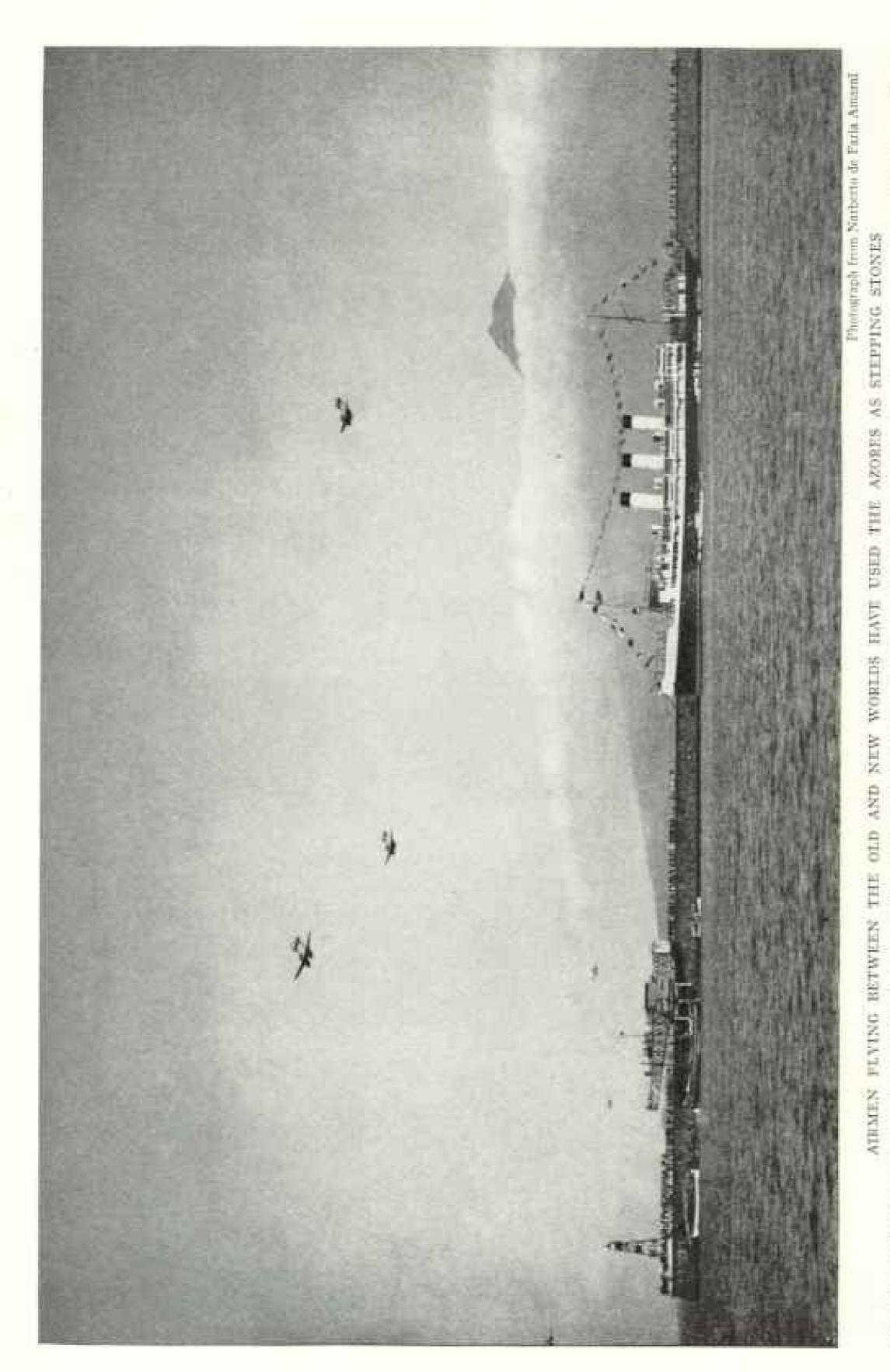
NEARLY HALF A TON OF HORNED FURY CHARGES THE CROWD

Volunteers proof the infuriated animal with sticks or umbrellas and try to dodge his funges. Just abort of homicide the beast is suppersed to be checked by a group of stalwart young men who cannot be seen in the picture but are clinging to the long rope thed to his pudded homs. There is a saying on Terceira Island that if no one is burt the bull is no good (see page 56). The poor animal is not wounded or killed in this so-called "aport" but it is certainly unduly annoyed.

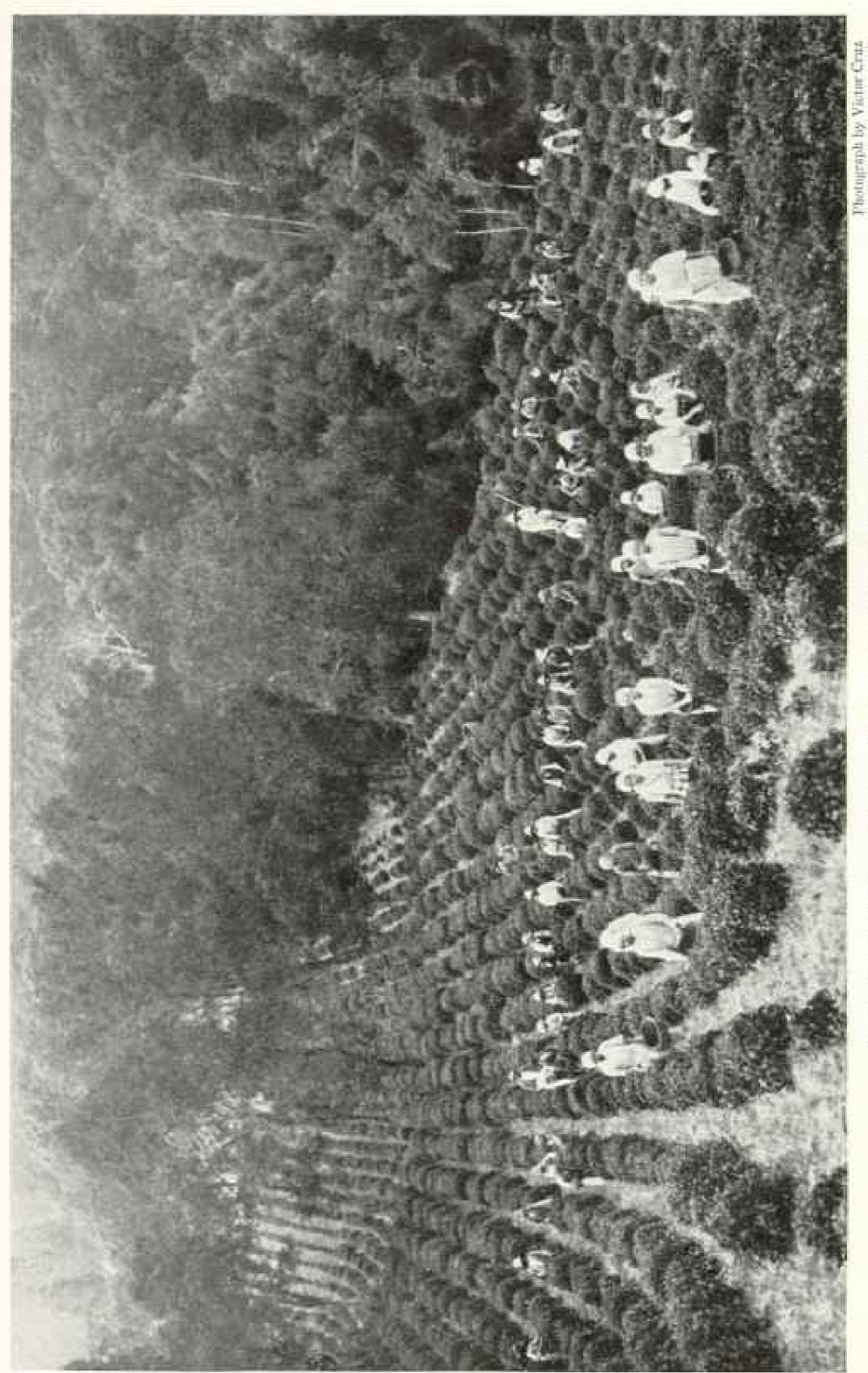


WATERS OF CALDERIA DAS SETH CIDADES OF THE THE VIVID BUTES CAUSED FOLKLORE SAYS A FARE LADY

Into one call she jumped, so the story goes, and the pool took the color of her particuat; her parazol fell into the other part and dyed it a different shade. One section is indeed a brilliant blue and the other green, but science profess a more provide explanation (see text, page 30). Off at the upper left gleam the houses of the tiny town whose name means "Seven Cities."



Six of the 24 Italian scaplaner led by Air Marshal Italo Balbo on the remarkable mass flight from Rome to Chicago in 1933 are here flying over the splendid bay of Horta, Fayal, on the return trip. The steamer decked with flags in a support ship, Città di Catonia. Above the clouds rises the 7,821-foot summit of Pice Island.



A TEA PLANTATION LENDS A TOUCH OF THE EXOTIC RAST TO THE AZORES

These islanders grow enough of both green and black varieties for their own needs, and ship quantities to the mainland. The Portuguese have had the tea-drinking habit since early days, when their navigators discovered the sea route to the Orient (see page 40). Between the long, procise rows of low shrubs on São Miguel walk matrive workers with baskets, picking the crop.



Photograph by J. Leite

A BUSY STREET IS CLEARED FOR A WILD BULL'S ACTION

The angry creature corners his foe in a doorway. Only a timely tug on the long leash lying across the steps at the right can prevent a casualty in this "bullfight of the rope" (see pages 53 and 58). Here, on Terceira, unusually savage cattle are bred, and in 1581 a herd of them driven at the invading Spaniards helped to rout the enemy.



Photograph by Wilhelm Tebien

TRAINED DOGS ARE THE ERRAND BOYS OF PONTA DELGADA

Big, shaggy, intelligent animals trudge off to market bearing a basket with a written order inside to do the family shopping. Carefully taught by specialists, good dogs never loiter or play when on duty. At noon they often carry lunch to their masters, some traveling miles from outlying farms.

main diet of the peasant consists of soup of cabbages, beans and potatoes, white cornbread, and fish. Pork and beef are only for special occasions, such as religious holidays. In the Ponta Delgada market 60 small fish sell for two and a half cents; a pound of green peas for less than two cents. A fresh live lobster, which is only for the well-to-do, costs 25 cents.

The Government has established in Ponta Delgada, Angra do Heroismo, and Horta, capitals of the three districts of the archipelago, modern stations of animal husbandry and agriculture.

AZORES LINKED WITH NEW WORLD HISTORY

After a month on São Miguel we made the circuit of the seven islands to the north-west. Sailing at 9 in the evening, we anchored at dawn in the little harbor of Angra do Heroismo, on the island of Terceira. This attractive, historic old town, hemmed in

by green hills, nestles at the head of an oval bay (see Plate VI).

From the first, Terceira (third island to be discovered) has been the home of explorers and warriors. In 1474 half of the island was given by the Crown to João Vaz Corte-Real as a reward for his voyage to Terra Nova dos Bacalhaus (New Land of Codfish: Newfoundland), the first European except the Vikings, so the Portuguese affirm, to set foot on New World soil. I saw the house Corte-Real built and the church where he lies. In the same church is the tomb of Paulo da Gama, second in command on the first voyage to India, who fell ill on the way home and was put ashore



Photograph by Harriet Chalmers Adams

NEW WOODEN SHOES, BUT NOT FOR HIMSELF

Still worn in the country districts, the crude footgear is made from the light acacia wood which abounds here on São Miguel. The price varies from two to eight escudos (10 to 40 cents), depending on whether the clogs are trimmed with canvas or leather.

> here, while his brother, Vasco,* sailed on to Lisbon to receive the highest honors his King could bestow.

> Other brave mariners sailed from Terceira to the Far West, one of whom is credited in Portuguese annals with the discovery of Labrador.

Although some historians question the voyages of the father, two sons of Corte-Real, Gaspar and Miguel, are known to have sailed from Angra do Heroismo, but they did not return. In the Town Hall I was shown a sealed box presented to the city by Prof. Edmund B. Delabarre, of Brown Uni-

* See "The Pathfinder of the East," in the Na-TIONAL GROGRAPHIC MAGAZINE for November, 1927. versity, who some years ago deciphered, on a rock by a Massachusetts river, a worn inscription which he translated:

"Miguel Corte-Real, by the grace of God,

chief here of the Indians, 1511."

The box in the Town Hall contains soil

from a spot near this rock.

It is quite possible that Christopher Columbus, while on a visit to his brother-inlaw, Governor of Graciosa, the island next door to Terceira, profited by tales told him by early Azorian voyagers who had sailed west and returned.

In the 16th century, men of Terceira put up a splendid fight against the invading Spaniards. When their stronghold fell, Philip II made it his bulwark against British sea rovers.

Angra received the handle "do Heroismo" to its name when, a century ago, it sent troops to Portugal to win battles for Dom Pedro IV (who was Dom Pedro I, Emperor of Brazil) against his brother, Dom Miguel (see Color Plate IV).

In the massive fortress built by Philip II, political prisoners are now held. During the World War German residents of Portu-

gal were brought here.

Gungunyana, the famous Zulu chief, who held out against the Portuguese until 1895, was long imprisoned with three of his male relatives in this fortress. The story is told that when the old warrior reached the Cape Verde Islands, on his way from Mozambique to Terceira, he was informed that all eight of his wives could not accompany him further, but that he might choose one to go with him into exile.

"Choose between my eight Ioyal ladies? Impossible!" And the chivalrous old Zulu

left them all behind!

The leading export from the Azores to the United States is embroidery of the Madeira type, made by the women of Terceira.

This is the only island of the Azores where bullfights are held. These are in the Portuguese fashion—no bulls killed and fine horsemanship displayed.

"THE BULLFIGHT OF THE ROPE"

The most popular sport, however, is tourada d corda, "bullfight of the rope," which is a game rather than a fight, and most amusing (see pages 52 and 56).

We motored up a long winding street on the outskirts of the city and were seated on a second-story platform which was really the roof of one half of the house. As far as we could see, up and down the street, were similar platforms thronged with men, women, and children. A wild bull appeared at one end of the street, its horns tipped with brass and a rope around its neck. Hanging on to the end of this 200-foot rope were seven stalwart lads, each wearing his white shirt outside his trousers as a badge of office.

Men and boys now leaped from the walls into the street. The game is to annoy the bull by means of jeers and by thrusting at it sticks, umbrellas, or any objects at hand. As the infuriated animal charges, its persecutors dodge, vault to safety on the nearest wall, or slide into a doorway.

Four bulls were introduced, one at a time. Fearless and agile, the bull-baiters are seldom injured and never tire of the sport. Sometimes the bull escapes from the rope men, whose part is not an easy one, and dashes down into the very heart of the city.

In Angra do Heroismo I visited one of the Azorian meteorological stations. These stations are the watchdogs of the mid-Atlantic, warning ships of approaching storms, sending word to craft on the distant coast of Morocco of the coming of the houle, that strange wave which rises between Iceland and the Azores and sweeps across the ocean.

After motoring to the landing field for airplanes on a plateau four miles from the city, and to Praia da Vitoria, across the island, with one of the finest natural harbors in the Azores, we sailed on (page 62).

Graciosa from the sea is not as attractive as its neighbors, but does its part agriculturally in spite of shortage of water, producing wine, cereals, and cattle. The Azorian donkeys are bred here. In the bottom of its rock-strewn crater is a large cave with a fresh-water lake. I did not visit it; but Albert, Prince of Monaco, who did much scientific work in the seas of these northern islands, describes it as "a unique miracle of Nature."

São Jorge is beautiful and wooded; its pastures are famous in the archipelago. In the port of Vila das Velas there is a statue to the memory of a native of the island who "struck oil" in California and left money for the sick and poor of his boyhood home.

Pico, whose imposing volcanic peak rises 7,821 feet above the sea, is poorly watered and raises its vines in an unusual way. In rifts in the old lava flow, lupine is placed



Photograph by Wilhelm Tobies

FUTURE BEEFSTEAKS COME ABOARD FOR A ONE-WAY THIP TO LISBON

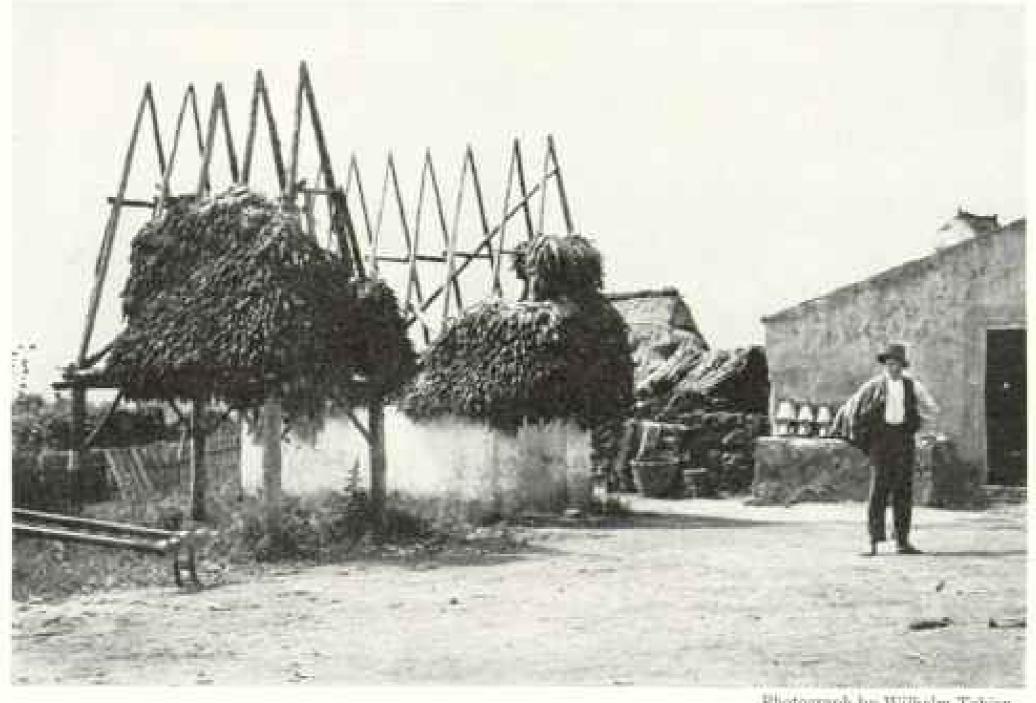
Brought out from shore in barges, the animals are hoisted to the steamer's deck in a sling at the end of a cable. Beef and dairy cattle thrive in the Azores. On tiny Corvo, seldom visited by ships, a special "vest-pocket" breed has been developed, with milch cows little more than three feet high.



Photograph fenn Harrier Chalmers Adams

HARDY ISLANDERS LIVE ON THE SEA-FRINGED TIP OF AN OLD VOLCANO

Tiny, lonely Corvo, whose name means "raven," is the smallest and the most northern of the Arores. It has only one settlement, Rosario. Before radio came, the inhabitants used signal fires to send organi messages to Flores, a dozen miles away (see text, page 64).



Photograph by Wilhelm Tobien

IN THE AZORES THE STAFF OF LIFE IS CORN

Outside nearly every farmhouse stand wooden frameworks to which the ears with the husk on are tied. Every week a supply is taken down to be ground for use in bread, cakes, or porridge or as food for chickens and livestock.



Photograph by Maymed Owen Williams

EVEN IN THE LEISURELY AZORES THERE IS "HOMEWORK" TO BE DONE

These schoolgirls of Pontu Delgada are going home with their books and small, neat baskets, in which they carry either their lunch or handwork—sewing, knitting, or embroidery. The sidewalk designs are formed of small black and white stones.

to decompose, and in this improvised soil the young vines are planted. Pico wine is stronger in alcoholic content than other Azorian wines.

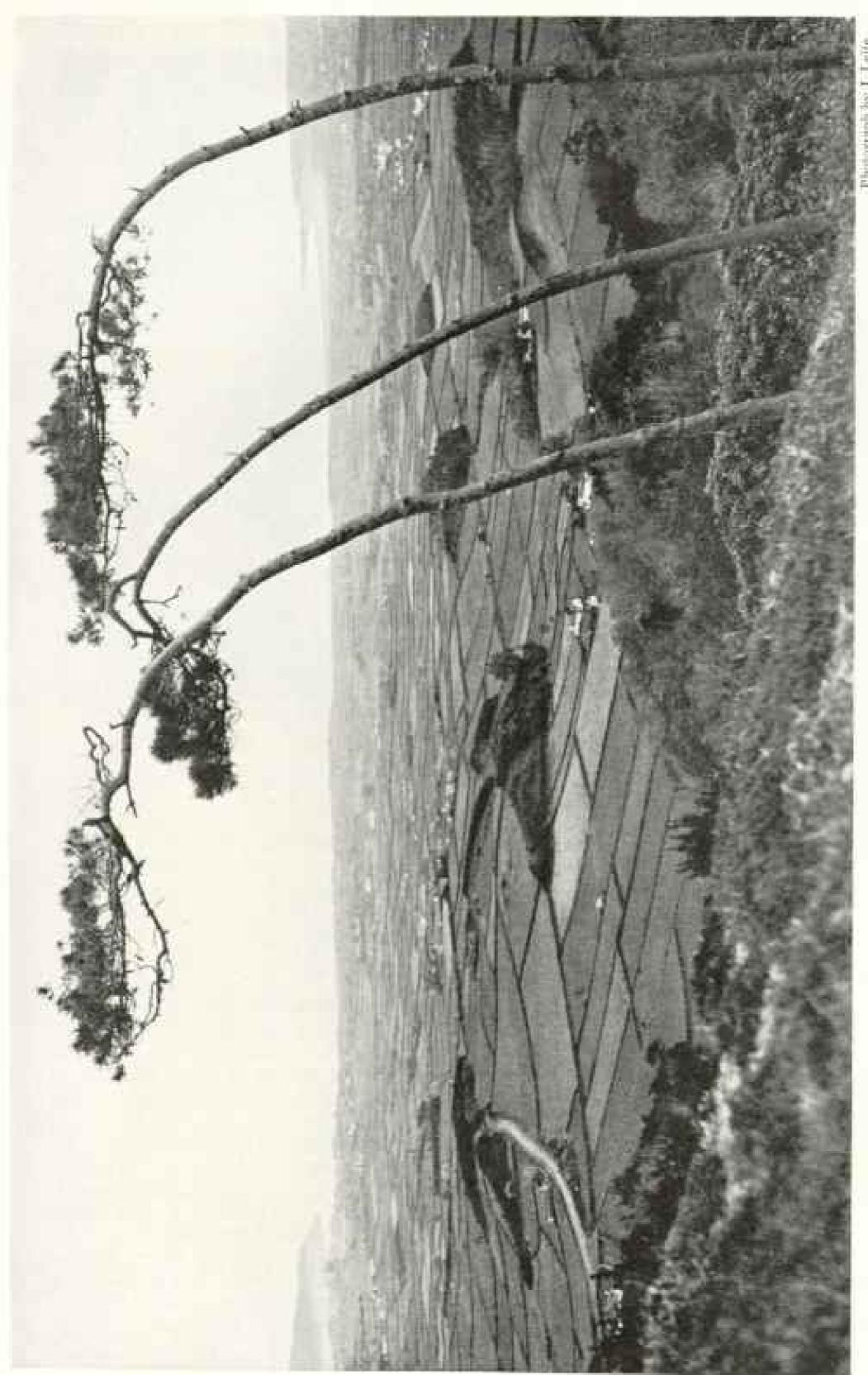
There are lookouts on the hilltops, and when the call, "Baleia! Baleia!" rings out, the specially built boats are swiftly launched, towed nowadays by a motorboat, and off they go to chase the giant of the deep. Harpoons, thrown by band, are used, and spears when the exhausted whale is at last brought alongside—a combat requiring courage and skill. The first whale of the season had been killed shortly before our visit, in early June, and our ship loaded drums of oil.

LOADING FUTURE STEAKS FOR LISBON

It was interesting to watch the loading of cattle at Caes do Pico, future beefsteaks for Lisbon. At all of the Azorian ports we anchored offshore. The cattle were rowed out in barges, 10 or 12 to a barge. A broad sling was placed under an animal, a rope tied fore and aft to prevent kicking, and, by means of a cable from our ship securely hooked to the sling, the creature was hoisted aboard most humanely (see illustration, page 59).

The conical mountain of Pico, the glory of the Azores, is best seen from the island of Fayal, separated from Pico by a channel about four miles wide. In winter it wears a mantle of snow. We saw it pearly gray, with a girdle of floating clouds; clear and blue, sharply outlined against the sky; glowing rose, fading to mauve and deepest purple against a star-spangled background—a never-to-be-forgotten sight. No other volcanic peak of my remembrance appears so seagirt and isolated as this queen of the North Atlantic (see page 54).

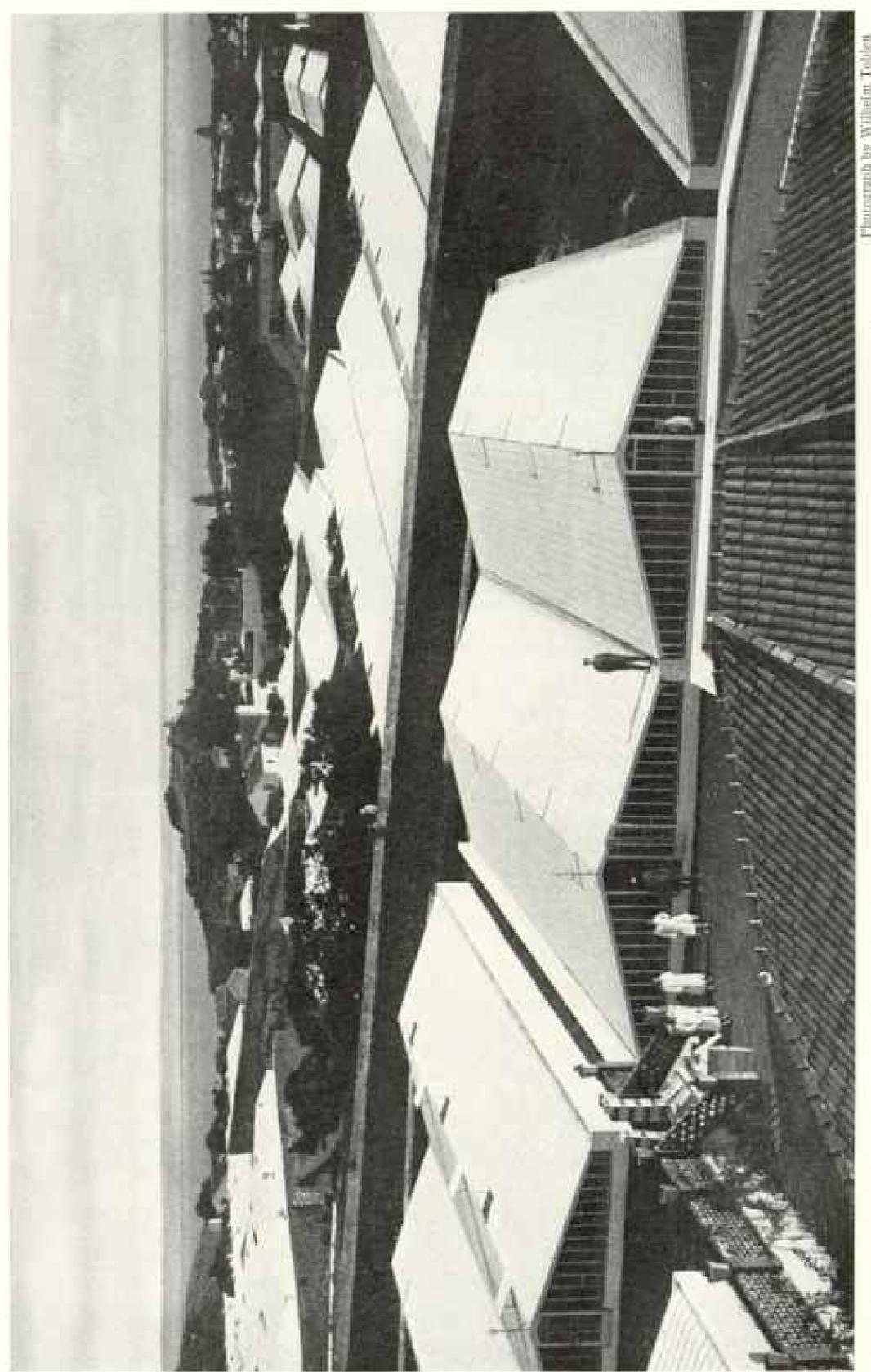
Horta, on the island of Fayal, was a town well known to Americans in the days of New England windjammers and whalers (see Color Plate II). It is the seat of the oceanic cable station. In one building six companies—British, German, Italian,



Photograph by J. Lelle

BOTH WAR AND VOLCANIC ASHES HAVE SWEPT TERCERA'S CHECKERBOARD PLAIN

Its name recalls the strife between rival claimants of the Portuguese crown a little more than a century ago bent by the prevailing winds, hen toward a fertile expanse of weathered ash and lava. In 1630 the rain of its record it as "the ash year," The the distance is Prais da Vitoria, or "Bay of Victory," (see Color Plate IV and text, page 58). Stunted evergreens, ashos was so constant and memorable that the island's arms



hutograph by Withelm Toblen

PONTA DELCADA THOUSANDS OF PINEAPPLE FLANTS ARE "SMOKED" UNDER ACRES OF GLASS AT

All are made to blossom at the same time by a smoking process accidentally discovered when a pile of shavings caught fire (see text, page 40). To soften the sun's light on the young plants the roofs of the hothouses are coated with whitewash. The man in the center seems to be standing on the glass, but actually he rests his weight on a solid part of the roof.



Photograph by Wilhelm Tabium

TINY HOUSES ARE CROWNED WITH OVERSIZE CHIMNEYS

Cooking is done in huge stone ovens, whose size is indicated by the strangely shaped sentinels on the roof tops. Some are eight feet wide where they rise from the kitchen. These are humble homes in the upper part of Angra do Heroismo.

French, and two American-are housed, They transmit, through many systems of channels, messages to stations in North America, Europe, and South Africa, and, by interconnection, to every part of the world. Four staffs do the work of relaying. In the center of the building is a four-way window through which messages, mainly in code, are passed. Thus, should Jones and Jenks of New York cable to their Rome representative, the message, received by one of the two American companies, is handed through the window and a moment later is being received in Italy.

The foreign colony of 200 has dwindled of late to half this number. Since the severe earthquake of 1926, Horta has been rebuilt and its harbor is now being dredged. The surrounding country is captivatingly fresh and green, the heights surmounted by circular stone windmills. The miller blows his horn to notify the farmers that the wind is up and the sails are set to grind the grain.

Locally made articles for sale in Horta include exquisite lace, objects made from whales' teeth, and fragile, snow-white carvings from the pith of the figtree.

It is a night's sail from Fayal to the jagged rock of Corvo, a single extinct volcano which thrusts only its head above the sea. We reached it at dawn of a rainy day and went ashore in a rowboat, climbing up the slippery stone incline to the island's one settlement, Rosario (see page 60).

Corvo's 700 hardy sons and daughters, whose home is lashed in winter by the sea in its fury, are isolated for weeks at a time, even from their only near neighbors on the island of Flores, 12 miles away. In spite of hard work and exposure, they are a sturdy lot, living a simple, contented life. Money is scarce, but sufficient maize, wheat, vegetables, and grapes are raised to supply local needs, and the diminutive breed of Corvo cattle yields abundant rich milk, The islanders are practically vegetarians in spite of the marine life about them.

There are no locks on the doors; there is no need of a jail. The schoolmaster is the local administrator; the priest is the Should someone be attacked counselor. by an agonizing toothache, sails are set for the dentist on the island of Flores, if the

sea is not too rough.



Photograph by Mannel J. Mator

SOME OF THE GLAMOUR OF OLD WHALING DAYS SURVIVES

In other parts of the world huge "floating factories," or steam whale ships, take enormous toll of Nature's largest living mammal, but in the Azores men still pursue the quarry with small boats and hand harpoons (see page 61). At Capelas, on São Miguel's rocky shores, a sperm whale has been beached and flensers are stripping off blubber, which yields oil. The slit at the left is the mouth,

Flores is the most beautiful of all the islands. Water is so plentiful that streams cascade into the sea. The hedges of blue hydrangeas, the floral wonder of the Azores, are at their best from July to September on nearly all the islands, growing to a height of 10 to 20 feet. In Flores trails are actually cut through tunnels of these sky-blue blossoms. Masses of golden broom drape the cliffs. The island is without roads, but one is soon to be constructed. Both Flores and Corvo are connected by radio with the other islands.

WHERE COLUMBUS ANCHORED

From Flores we sailed back to the islands of the central group and on to Ponta Delgada, to pack for the voyage to Lisbon by way of Santa Maria, our last Azorian isle.

Santa Maria was upraised from the depths before its sisters and brought with it limestone and clay, which the other islands lack. The pottery of the archipelago is made here, including huge jars of the ancient Mediterranean type.

Our ship made port in Vila do Porto to

load cattle. In this open roadstead disembarking is often fraught with danger. At a little port across the island, Christopher Columbus brought the Niña to anchor in February, 1493, on his return from his first voyage to the New World. His diary relates that members of his crew went ashore to offer a prayer of thanksgiving at the chapel of Our Lady of the Angels, which still stands, and where a tablet near the high altar records the event. The Governor of Santa Maria had orders to detain Columbus and tried to lure him ashore, but the wary Admiral slipped anchor and sailed away to the mouth of the Tagus River. We followed in his wake.

I stood by the ship's rail at sunset, as Santa Maria faded from view, and the beautiful Portuguese word saudades came to mind. There are few more expressive words in any language. It cannot be adequately translated into English, but it means, this one little word, fond remembrance, a longing to see again the loved one or the homeland, a longing softened by hope. It is written on the heart of every



Photograph by Franklin Adams.

HERE THE "MOTHER GOOSE" HAT IS STILL IN STYLE

Like a picture out of an old storybook or a vision of witches at Halloween is the sight of the country women of Santa Maria, with their tall, quaint headgear, aprons, and canes. Their cattle are particularly large and many are shipped to Lisbon. On this island some of the sailors of Columbus went ashore to offer prayers of thanksgiving after the first voyage to the New World (see text, page 65).

Azorian, no matter where he may roam, when he thinks of his islands, so radiant, so clean, so fresh, so green.

Ilhas dos Açores, Islands of Hawks; islands of sweet-singing birds, native and migratory! Today birdmen vie with the feathered folk in piercing the blue and, like the birds of passage, make these islands ports of call.

This outpost of Europe, with its harbors for seaplanes and its field for land planes, seems destined to become an important North Atlantic air base. To those who love the sea and find long voyages restful, transatlantic aircraft cannot, in our day, supersede ships of the deep; but there will be many who will fly the future oceanic airways.

In this fast-moving age, floating airdromes, like great sea gulls at rest on the waters, may in time become ports for ships of the air; but these friendly Portuguese islands will remain refreshing bits of earth and verdure in the wide Atlantic.

Notice of change of address of your National Geographic Society by the first of the month be received in the offices of the National Geographic Society by the first of the month to affect the following month's issue. For instance, if you desire the address changed for your March number, The Society should be notified of your new address not later than February first.

LIFE'S PATTERN ON THE ITALIAN RIVIERA

By HELEN CHURCHILL CANDEE

WO distinct designs for living are traced along the beautiful coast of the Italian Riviera. One is splashed with gaiety and sport; the other is as normal as life in any of the other provinces of Italy. Whoever neglects to penetrate the vicissitudes, hopes, and trials of the life of the native for the sake of that more obvious life of the casinos and luxury places misses the true soul of the region.

It was to find this life of the people that I fled hotels and villas and nested in a tiny house clinging to the cliffs, not too far from the sea to run down for an early morning

splash.

Being alone, I found I was not alone. The little people—thus named through affection—lost their timidity and became friends, humanly anxious to relieve the loneliness which they thought was my sad estate.

Must you know just where my little home lay among its terraces of olives and vines? Lest you identify it, I say loosely that it is on the Italian Riviera di Levante, east of Genoa (Genova), which includes Rapallo and some of the most beautiful bits of intimate scenery along the Mediterranean (see

map, page 69).

Vanna was late in coming one morning. She knows I must have my coffee at 8, set out on the terrace. There my spirit can leave the earth and float out over the Mediterranean waters. Time-wasting a reverie would be in a town; but I avoid towns. My tiny blocklike house clings to a cliff in true Italian fashion, and its out-of-doors is composed of tiny terraces, each with a character of its own, one specializing in fruit, another in olives, and all in flowers.

In the third terrace below me I see a boy of ten hiding among the grapevines, for I have a vineyard, mind you, on my scrappy property. It must be Vanna's boy Marco; he is a merry rowdy, and yet an Æolian harp for sensitiveness. It is not like him to sneak. He is more apt to come to me direct, with a smiling, "Buon giorno, signora," and then to disappear to the boats.

Vanna was disturbed; that was plain, as she set the tray down on the garden table, selecting for the creamy fresh butter the shadow cast by an olive branch.

"Diavolo!" she muttered.

"Is that a civil greeting, Vanna?"
"Scusi, scusi!" she exclaimed.

I like that word; it makes one feel that one is quick at learning Italian.

"But Marco really is a little devil. He will disgrace me and the memory of his father. It is he who has made me late with

the signora's coffee."

Of course I asked what the sinner had done, "He told me a lie, a lie! This morning I smelled smoke. I called him to me and asked him if he had been smoking. No, no; he had never smoked like the bad boys down on the shore. Signora, he opened wide his eyes like the angels around Maria Santissima, in the church, and swore to me he was as innocent as they."

The figure among the vines on the lower

terrace sneaked up nearer.

Vanna's anger flushed her face. She took savage joy in exposing the iniquitous Marco.

"Signora, if you will believe me, while he still looked at me like one of those holy angels, I pulled out of the pocket of his jacket three cigarettes, one of them halfsmoked and still warm on the end."

"Frightful! It might have set fire to

your house."

Vanna agreed with me eagerly, but re-

sented my smile as unfitting.

"That's the way houses burn down. We might even now be without a home had I not found the cigarette in time."

HEIGHTS AND SHORE VIE FOR FAVOR

There is a problem that I shall never settle: whether the Mediterranean is more beautiful when it is viewed from the height of my villa or when it is explored along the shore. This morning I gazed at the points of rock and at the sea that slips in between them to make blue bays with an edge of waves in fluffy ruifles, and preferred the heights.

But I had need of a pair of shoes—immediate need—for I was going to tea with one of the most charming of all the charming women of the stage, Julia Marlowe. She had a proper villa at Rapallo, not a barnacle on the rock like mine; and my shoes were all of the tramping sort.

"Marco, Marco," I called to the shaking greenery of the vines below. "Come here and tell me where is the shop where shoes

are sold."

No answer.

"Come, Marco," I commanded.



Photograph by Wilhelm Tobien

SHIPS HAVE PLOWED THESE BLUE WATERS SINCE HISTORY BEGAN

Idling in the harbor of Santa Margherita Ligure, these sailing craft follow in the wake of Phomician and Greek, Roman and Saracen. Above the popular bathing resort, the author wandered over a road so beautiful that it became a retreat for monarchs and composers, whose names add interest to the region (see text, pages 70, 74).

His reluctance on approaching was like an agony. As he stood before me, the tears fell from his big brown eyes. I feared Vanna had given him an awful drubbing. I sided with the criminal.

"I want you to go down to the port with me. We will buy cakes and chocolates, and eat them."

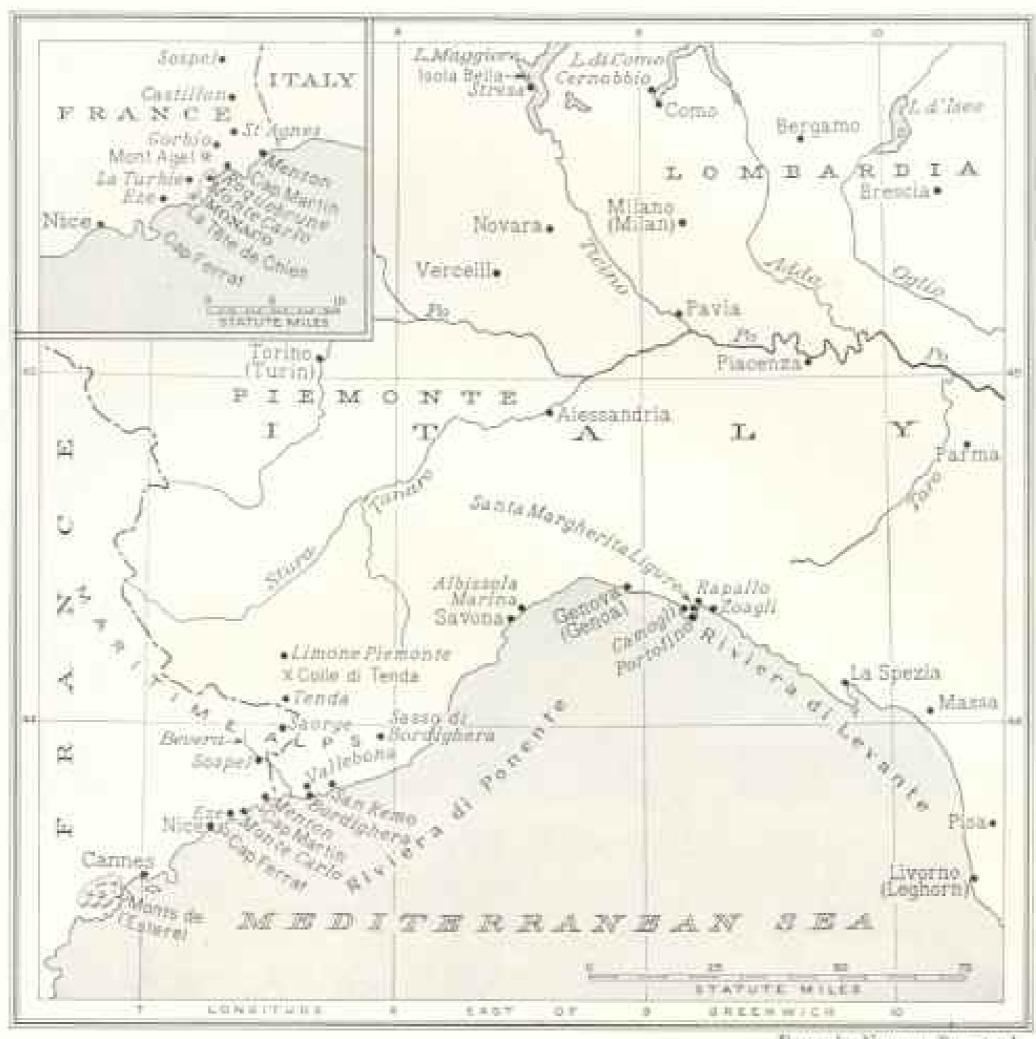
It was as if I had rubbed salt in his stripes. His crying was frank and free. "Non posso, non posso."

But why couldn't he go? He slowly turned his back to me with the agony of a repentant criminal who shows to his confessor the blood on his hands. From shoulder to shoulder, on the back of the small figure, hung a cardboard sign on which his mother had traced in red chalk the horrid word, LIAR.

"And I must wear it all day!" be sobbed.

"I will kill myself before school."

Vanna was creeping upon the scene, one corner of her apron ready for mopping up her tears. She made a sudden rush toward Marco, crying as hard as he. She called him an angel; he called her little mother, all amid mad caresses, until both fell to laughing, and together trampled on the ground the terrible word and destroyed it with merry heels.



Draws by Newman Burnstead

THE RIVIERA STRETCHES TOWARD THE SUNRISE AND THE SUNSET

Genoa is the dividing point. To the east is the Riviera di Levante—"the coast of the rising sun." To the west and on across the French border extends the Riviera di Ponente—"the coast of the setting sun." Along both those famous and historic shores the author wandered. Three areas on this map—the Riviera, the Mediterranean, and the Piemonte (Piedmont)—are so distinctive that similar regions elsewhere in the world are sometimes called by their names.

As for me, I left this denouement of discipline for the shoe shop, bemused over moral training,

HIGH-PRESSURE SALESMANSHIP

With ideas of shoes already set, I entered a shoe shop at the port. I had acquired a queue of children and old women, whose greatest joy of the eye was to watch the ways of the forestieri. That is another piquant Italian word. Persons of other countries are in this way dubbed "forest people," persons of the wilds.

Portofino houses are in a long row which curves outward into the sheet of water (see page 82). The buildings are four and five stories high (so convenient for housekeeping!), with shops on the ground floor. A long walk of masonry lies in front, a place for strolling and observing. The group which was watching me as I hunted the shoe shop fell away as I entered, feeling their futility as assistants in a sale.

"The signora desires?" Frank smiles went with the words from a woman of ability and her shadow of a son.

The signora thereupon explained her desire meticulously—black pumps, high heels, size five, and narrow.

Yes, certainly; the shelves held a large



Photograph by G. K. Ballanco

DICKENS CALLED THIS TOWN "A MOST PIRATICAL LITTLE PLACE"

Camogli has a fine old harbor and a ruined castle, beloved by artists. If pirates ever brought their booty to these shores, their ships have long since given way to fishing vessels and pleasure boats, serving a peace-loving people (see page 84).

assortment, and the signora's desire should be supplied. She turned away to find what she well knew was not there.

Now the fine skill of the merchant trade began to operate. The helpful son remarked on the beauty of the day and waved a hand at the sparkling land-locked pool which formed the toy harbor. When my eyes came back to the shop, its mistress was caressing a pair of white oxfords. Catching up my glance, she held high the shoes as objects of irresistible beauty. "Ah, what beautiful shoes!" she breathed in worship, leading my eyes to follow hers.

"Beautiful," I echoed without interest.

"A pair of black pumps, size five," I reminded her. At that point another diversion was introduced.

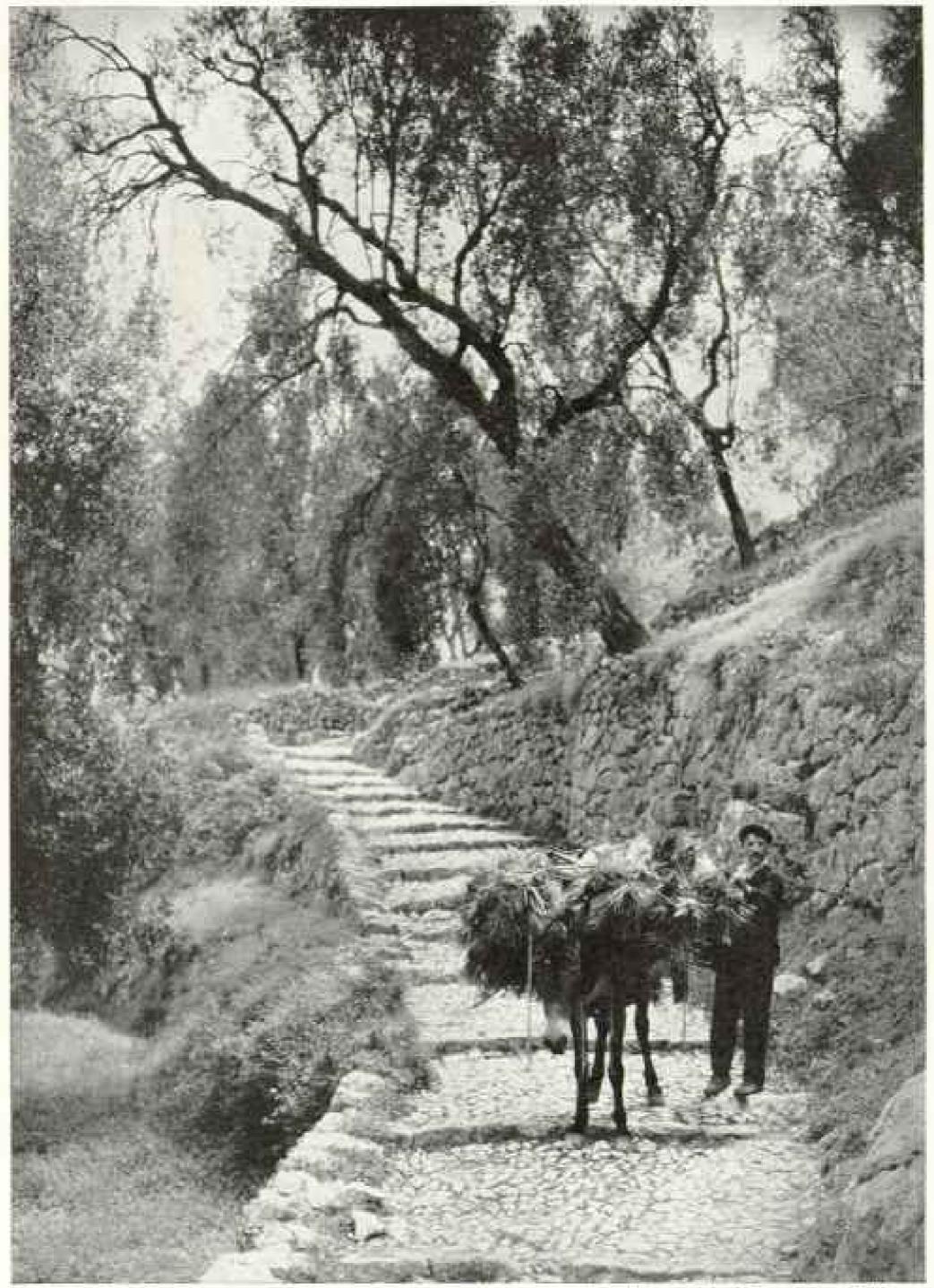
From a door at the back emerged an entrancing bambino—gay, self-reliant, though uncertain knees sustained him. He put his dark eyes on me and, making a laughing rush at me, grabbed my skirts just at the limit of his balance. Black shoes? Who could think of them at such a moment? I sat down that the tousled head might rest on my knee, and the mistress of the shop dextrously pulled off my shoes and slipped on the white pair, while she and the young assistant raved over their beauty.

When my own shoes were replaced and I left the shop, I held under my arm a parcel, a pair of white oxfords, when what I needed was black pumps. In my heart was abundant love for Italy and her adorable wiles.

A BIT OF TOYLAND

Portofino is an unbelievable sort of place. It gives no intimation of its existence until it lies before you, below you. It is reached by leaving Santa Margherita and the sea and wandering over a road in the hills (see illustration, page 68).

Emperor William perhaps thinks of these wooded hills as he domesticates in the flat



Photograph by Maynard Owen Williams

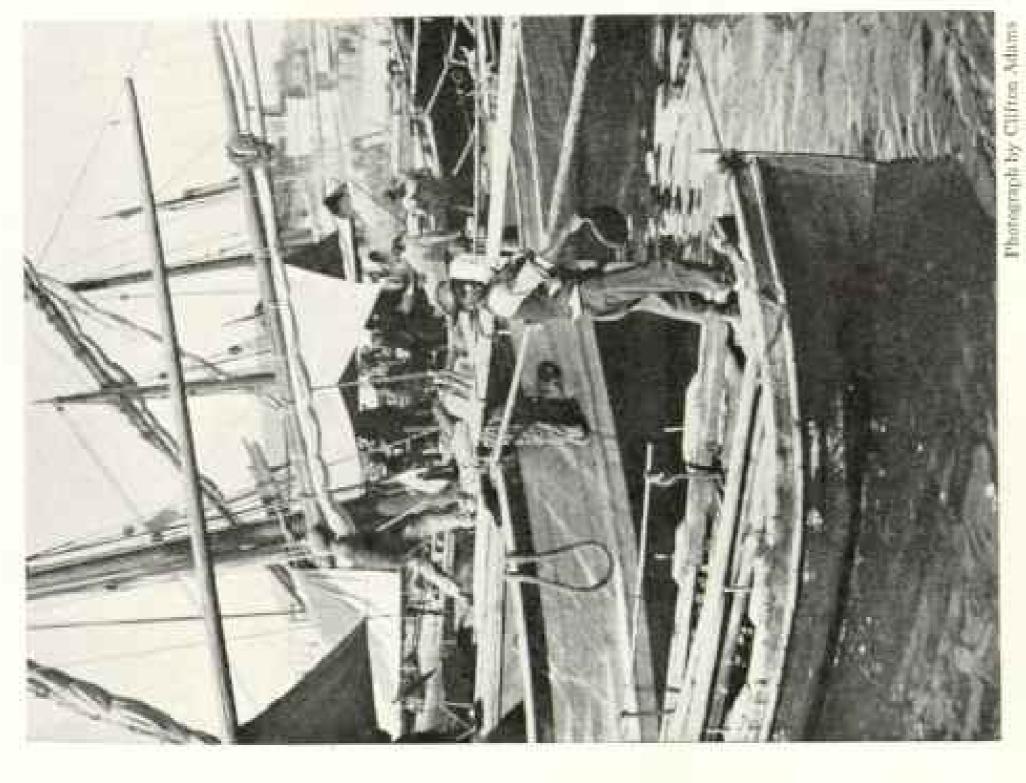
HIKERS PAVOR THE SHADY BRIDLE PATH FROM GORBIO

Motor roads link snowfield with bathing beach, but trampers prefer to share cobbled paths with patient donkeys and the "little people." A load of evergreen branches is being carried down to some valley kiln or oven, where a hot, quick fire with few cinders is desired.



SHORELINE PROMENADES ARE THE ESSENCE OF THE RIVIERA

his name to this playground along a 200-mile coast (see map, page 69). Imported long ago by the Saracens, of San Remo, only a short distance from the snowy Maritime Alps. Between mountain and sea lies the narrow strip which gives i



FISHING BOATS MAKE READY FOR THE SEA

Genoa, birthplace of Columbus, is still a true City of the Sea, and serves as the busy trade mart of the Italian Riviera. She builds ships of commerce and ships of war, and has a large fishing fleet.

PALMS FRINCE THE SHORE OF SANTA MARGHERITA LIGURE Around them boats are beached, and maritime life surges to the very arcades of brightly tinted homes, whose gardens are the waves and whose produce



Photograph by Edizioni Brogi

EARTHQUAKE INSURANCE IN SAN REMO

In the hillside "Old Town," masonry arches are thrown across the narrow air-shaft streets to unite the tall houses against seismic disturbances (see illustrations, pages 75 and 85). Netherlands. Wagner found peace and harmony here. The houses lived in by the great, being old castles of picturesqueness, are looked on always with delight.

All of a sudden, as the high road turns, a picture lies before you. It is something of the imagination, unreal, but with such charm as thrills a child after the visit of Santa Claus. You want to thrust out a sudden hand and topple over the row of colored houses set in the water in an outward sweep, for the fun of standing them up again.

And where does the water come from? All around are wooded hills; no sight nor sound of sea. But for the little yachts at anchor, it might be thought an inland lake. But not even that, nor anything else, gives reason for the curving line of high houses which seem to have been transferred en bloc from some crowded town.

Take a climbing footpath up the opposite hill. As you mount, you pass gardens of an occasional fine villa. They seem not to belong at all, but must be tolerated because it is the way of some rich Genoese to build such misfits.

Up at the top of the path is a little church on a terrace. Walk forward beyond the obstruction of verdure, and the sparkling Mediterranean lies spread at your feet. One good jump, a stiff fall of 500 feet, and you would be in its frill of waves under the cliff. Contrast it with the hilllocked harbor of Portofino just behind you. You laugh with delight at the beauties of inconsistencies.

A mother with a baby in her worn old shawl emerges from the chapel door. They are shabby, dulled with poverty. You rush to them and thrust as many silver coins into the baby's fists as they can hold, to see happy wonder in the mother's eyes.

"Cookies and candy for the baby," you say, knowing well that the money will buy meat and macaroni, not sweets.

A CLEFT IN THE ROCK

A gate beside the public terrace opens into a path along the top of the cliff and reaches ultimately one of the villas that I am going to buy when the world is differently ordered. It has been used as a setting for novels, as a retreat for distinguished invalids, as a home of reasonable revelry for orderly intellectuals, but the casuals of the road may not penetrate. It is the Castello San Giorgio, a private property, and



Photograph by G. M. Ballance

HERE DONKEYS AMBLE AND TIME STANDS STILL

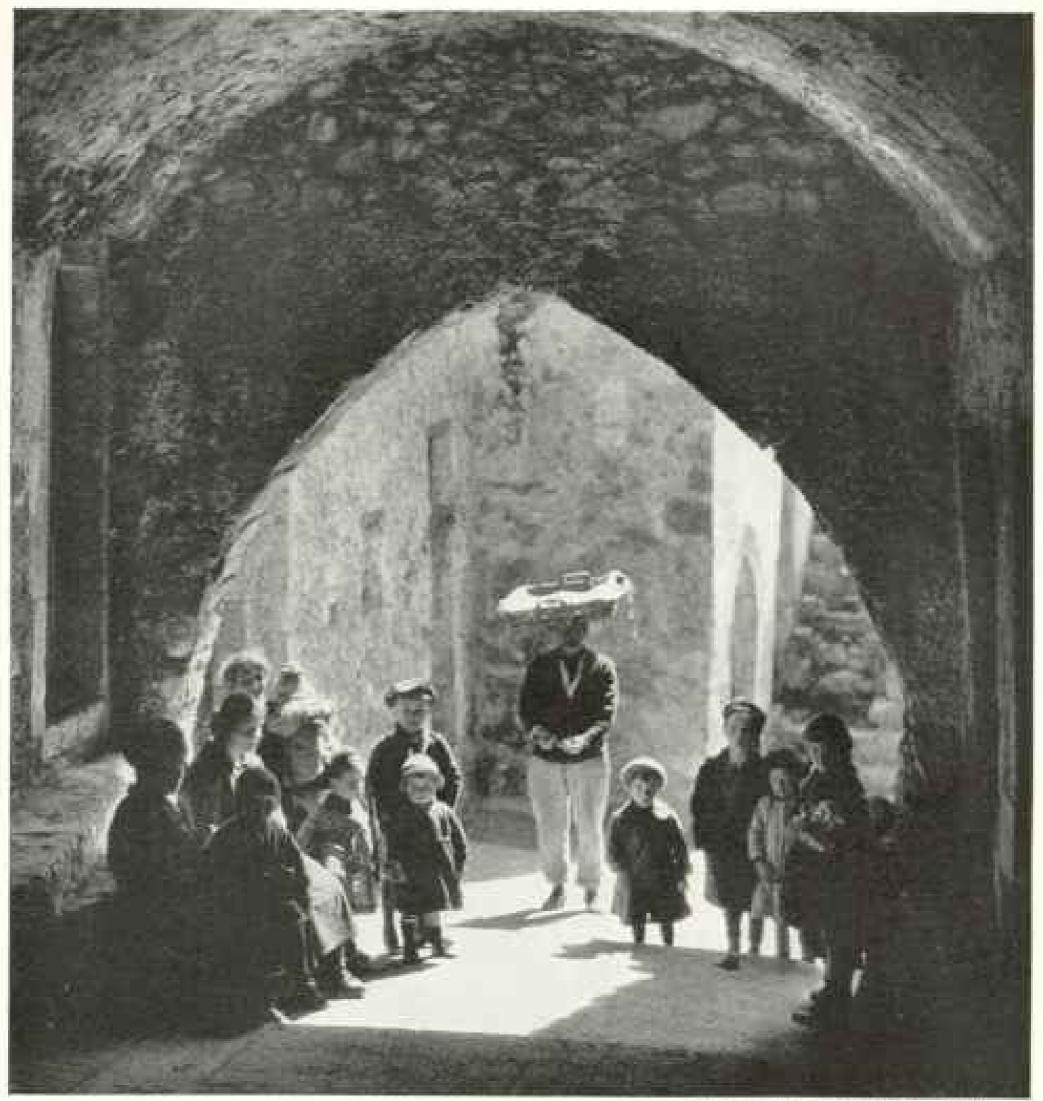
San Remo, Italy's oldest and largest winter resort, spreads its luxurious New Town along the sea. But adjoining this seasonal city of pleasures is the Old Town, along whose cobbled step streets life changes little with the years (see illustrations, pages 72, 74, and 85).



Pantugruph by Hans Hildenbrand

NOTHING SECRET ABOUT THIS GENOA RESTAURANT.

Although soup, fish, and ravioli rather than griddle cakes are on to-day's bill of fare, the cook practices her alluring legerdemain within view of those to whom "home cooking" appeals.



Photograph by Maynard Owen Williams

THE FISH MAN USING HIS HEAD WAS NO CURTOSITY, BUT THE PHOTOGRAPHER WAS!

Because rock shoulders alope from the Alps and break off abruptly into the sea, road and railway builders must consider the ant and bore many tunnels. Arched streets of hill towns, such as this leading to the castle of Roquebrune, are splotched on sunny days with bright patches and dark shadows that delight the painter and challenge the lens.

one stops, longing like the peri outside the gate of paradise.

Now that I call myself one of the little people, I find Rapallo has become too much of a resort. Nature gave it a harbor curving in from the peninsula of Portofino, but a shallow harbor, just nice for fishermen, not yachts. A promenade follows its pebbly beach, where children played without danger and where groups of maidens walked on Sundays and threw important glances over the shoulder at groups of young men who did the same. All these things go on still, but under the eye of the people of a casino and big new hotels (see page 86).

"Would you like a barca, signora?" The offer was made on the shore by a shabby man anticipating a refusal. But he was not refused; the word barca was not to be resisted. Poets always sail in barks and singers warble in them.

"A pretty barca, ch?" pleaded Sandro, showing white teeth as he saw a probable patron.



Photograph by G. R. Ballinne

NARROW STREETS ALLOW LITTLE ELBOW ROOM

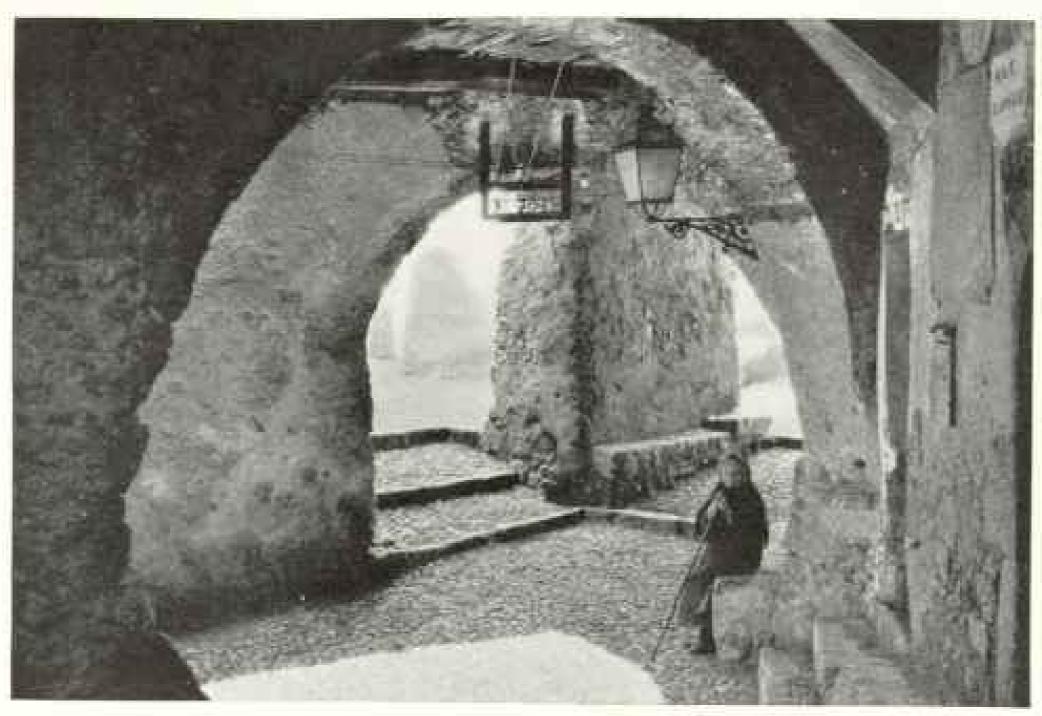
Menton is more than a health resort, spreading its gay gardens to catch the welcome winter sun. Here, in its "Old Town," the permanent population is sheltered from blazing summer skies by tall houses, along whose fronts the weekly wash hangs to dry.



Photograph by Hamilton Revel

THEY PAUSE IN THE MIDDAY SUN

The siesta after the noon meal is not a consequence of lazy habits. Such humble Italians go early to work. They labor hard, and a short nap, which may have to be taken in public, makes the second half of the day as fruitful as the first.



Photograph by Maynard Owen Williams

A "BUSY CORNER" IN ST. AGNES

One lone figure stands for the crowds which once passed beneath this maze of arches at the crossroads of a formerly populous town, now almost deserted because highways, not eastles, determine modern city sites.

"You are a fisherman," I accused, as he helped me into a craft which might have been a lifeboat for four oarsmen.

"Very few fish," he explained. "Must carn money with the boat. Have many bambini. They must eat. They do not starve, but never can fill-a the bel'," he explained, concluding in English.

We were off on the twinkling ripples of the bay. Where a mountain stream ran down to join the waters, women were washing. A common sight, but if you think on the details it is a saddening one.

The woman who washes gossips with those near her; sometimes a young one breaks into a gay song. These ameliorations are but trifles against the discomforts. She who washes must do her work kneeling and bending well over the water, which is lower than she herself. What aches and weariness must be hers! And the water itself is as cold as mountain heights can make it (see illustration, page 85).

"Go on, a little faster," I say to Sandro.

As I may not help the situation, my distress is futile.

Mountain cliffs coming down into the

bay have split into occasional chasms. In one such chasm the early Italians chose to build a village and called it Zoagli. It is a mere crack in the rock. The railway to La Spezia is fastened on miraculously high above. I reached the town by boat.

LIFE LIVED ON THE PERPENDICULAR

Was Zoagli originally a smugglers' nest or a refuge from Saracens? Its appeal is strong; its beauties are unique; even its occupational life deserves both these adjectives. As it has no width, life there is lived on the perpendicular, a sort of Jacob'sladder life, ever ascending and descending; and all around is the greenery of the superb steeps which give so stingy a space to the little village.

The beach is a place of entry and departure. It is like a gate in a walled city, for movement and for gossip. No one can go or come without the cognizance of all the village. Can life hold back any secrets when lived on a series of ladders?

A few donkeys do the heavy carrying up steep ways, exclusive donkeys that by sharing the isolated life seem to take their place



Photograph by Maynard Owen Williams

MENTON IN MIDWINTER IS GAY WITH FLOWER BATTLES AND PARADES

Girls in sleeveless dresses pass in carriages decked with blossoms that thrive only in hothouses in less favored climes. As a resort, Menton rivals Cannes, Nice, and San Remo.

with the people. Their life may be arduous, but they have the honor of sharing the house as well as the labor of the humans—communistic donkeys, in a word. You can see them all alone, digging their toes into the upward path or turning suddenly into a docrway of this village without wheels.

It was at a café by the scrap of pebbly beach that I learned of the reason-for-being of Zoagli. The singular beauty which distinguished it was enough reason for me, but I did not have to "fill-a the bel'" of a family with my industry. As I drank a glass of rich red Barolo at a table under a tree, the host told me proudly that the best velvets of Italy had always been made in Zoagli.

That was its specialty. Hand-made velvets, certo. The signora could see the hand looms and the weavers at work up above now—yes, just as it had always been.

Patiently I climbed, although I scorned myself for not refusing a trap to catch a tourist. But it was true. The hand looms were there. The women weavers were at work. Piles of narrow ruby velvet lay about, catching the light like gems, in small, clumsy rooms that smacked of the 13th century.

For centuries this little village, hidden in a cleft of the rock, had upheld ideals of the craft of the weaver of hand-made velvet. Even the owner of a factory of a thousand yards a day must bow before Zeagli.

THE ADVENT OF A CAR

One day a touring nephew came my way. He had come to Italy to learn fine wines for an import business, he said; and, having finished Italy, he would go to France. He made laughter sound on all my tiny terraces when he gardened with Filippo, and in the kitchen when he took lessons from Vanna in making minestrone, that rich, thick vegetable soup. To Vanna's boy Marco he was a golden hero.

Thus ingeniously did he work to get me to leave the Riviera di Levante to experience the joys of motoring to places on the Riviera di Ponente and in that glad territory that now belongs under the French flag, but keeps the Italian soul in the breast of its oldest people (see map, page 69). It was the car that made the decision.

"In pursuit of wine we will do the restaurants of the region. The car will take us up into every valley that the Saracens ever occupied or the Lombards ever pillaged, and we will never once go to any restaurant that has ever fed any but the natives."

I saw he was of the right material.

We whisked away to another little cottage, one near Bordighera, and then began a life of delight, a vagabondage with a home as its base. San Remo was not too far; Menton was just over the border; Sospel lay behind, up in the mountains, not too far from the Tenda Pass, which nourishes Limone Piemonte, and always there was the sea, seen either from the heights or from along the shore.

The cafes on the front, the little native restaurants, were the treasures we sought. The moment of entry is formalized with the stiffness reserved for the stranger; but that flies and we are no longer foreigners after we ask for Italian dishes and Italian wine—"a good wine, such as you like yourself." You are one of them after that suggestion (see illustration, page 100).

Everyone who comes in asks for a specialty. It is far better to observe the food of the Italian customers than to study the blurred bill of fare.

That is the way I discovered a thing that looks like a rolled pancake. But the taste—ah, inexpressible! A thin sheet of incomparable paste makes a cylinder in which hides a purée of seasoned spinach. Grated cheese is crisped all over the outside and browned butter is poured over the whole on a very hot plate. A glass of red Barbaresco goes with it to flavor it with sun of Piedmont (Piemonte).

FOLKS SHARE ONE ANOTHER'S JOY

"Here is Giofreddo!" shouts somebody, and a man who is stiff with Sunday clothes comes into the restaurant. "Tell us about it. We have heard from Menton. So you have sold your boat and you are rich! Benissimo!"

We listened in. Why not? Everyone is interested in a comrade. And thus we learned the story of how a fisherman became a grand ricco.

Ah, but he had been shrewd with his bit of land! It was a miserable rock along the coast. Only with utmost determination could his two-room house cling to the slant. But it was his and made a home, the best he could afford.

When he was out on the bay at night searching for the scant and scary fish of their sea, his wife could watch his boat's light moving up and down. His catch was small and precarious, they all knew that. He wondered if life held nothing more until he died. Ah me!

He played at bowls, the workman's delight, with a man who was employed on the Corniche Road. He was famous at the game.

His friend drew him aside and mumbled a secret he had overheard from the overseer. The lower road along the shore was to be widened; his bit of cliff was needed. Hold onto it; hold it until all the rest has been bought; then demand a big price and get it.

So Giofreddo cannily held his bit of rock. His hours on the sea were filled with wild dreams, all of which he shared with his wife in the evening's privacy.

PORTUNE MAKES ALL THE WORLD KIN

The gay world of casinos and automobiles passed by with dour looks at the narrow spot in the road which stopped their speeding, "Why?" they growled. Giofreddo was telling why, now at the Sailors' Café.

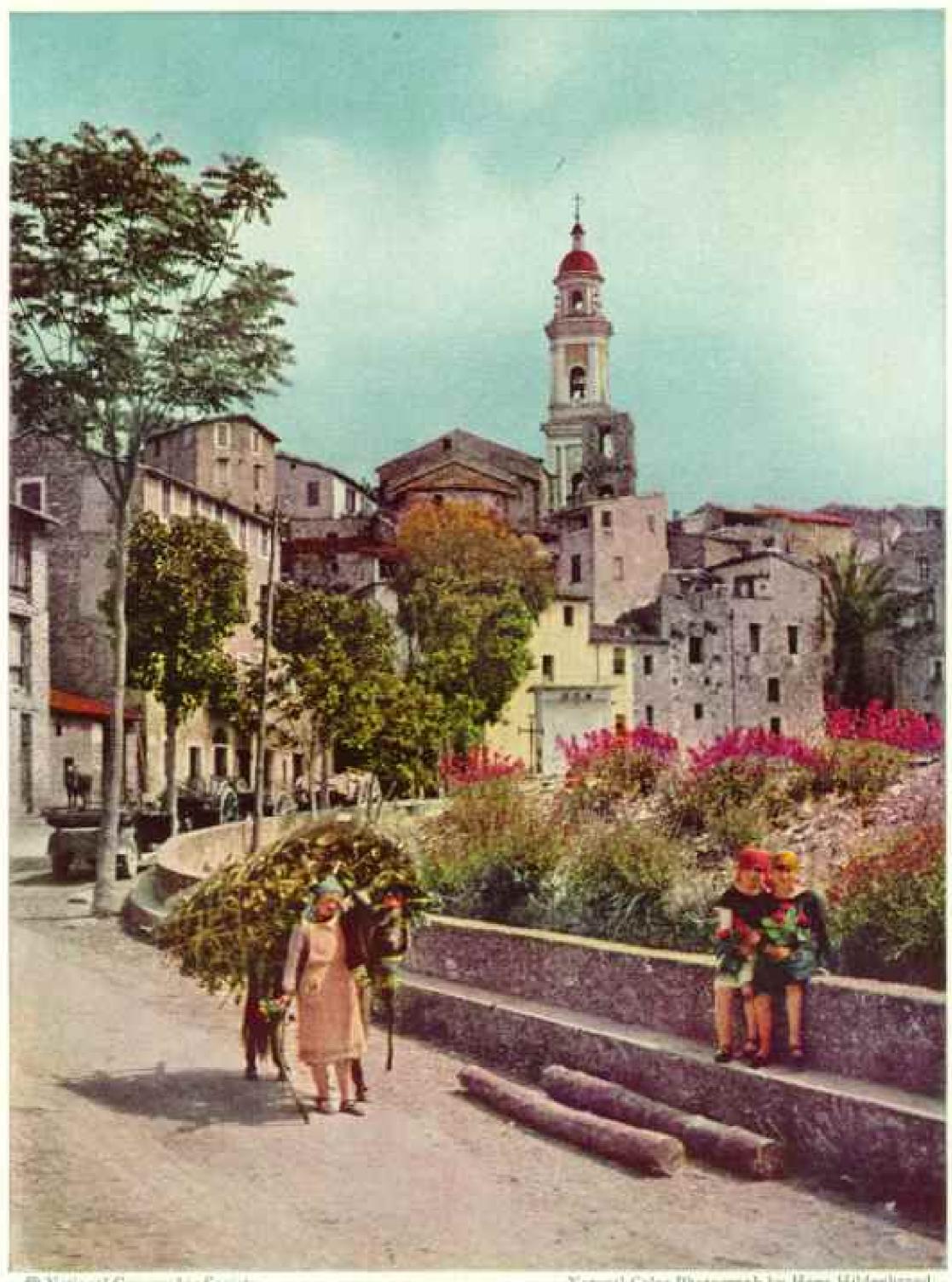
The time had come, and he had received a fortune for his land. The rich no longer cared how much was paid if the road could only be widened at the bottle-neck. Giofreddo was among the rich now and was taking a holiday to tell of it with dignity first; then with laughter and wine for all; then with tears, as his wife came rushing in hysterical with joy.

Much embracing, much laughter, exclamations, and the whole cafe became one family, not excepting ourselves, who yelled felicitations with the rest, feeling a bit near tears.

We had never realized before that the little fishermen of Mare Nostrum had not loved being cold and wet on the water at night. We had supposed they were part of the Riviera scheme of decoration. We knew now, and vowed to use heaps of fish in our housekeeping, which we would buy from the fishermen direct for wildly high prices.

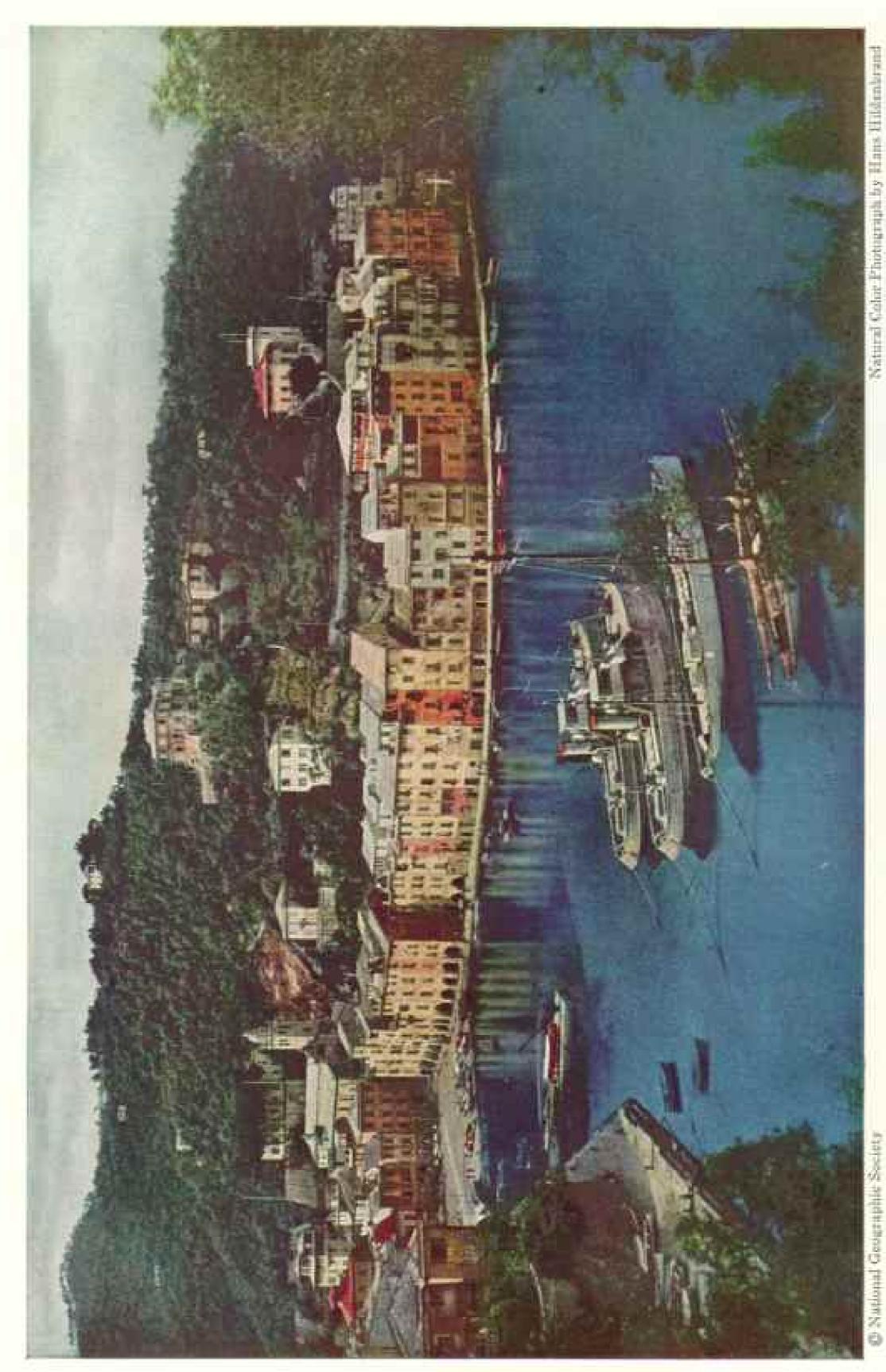
We would even eat an octopus! But only if that repulsive object was all their day's catch. To see one of the evil, slimy things in the market was bad enough. On the plate their tentacles actually recoil from the touch of the fork.

Yet along a rocky bit of shore you can see the landsman throw a line in the blue



Natural Color Photograph by Hans Hildenbrand:
FLOWERS FROM VALLEBONA ADORN MANY A EUROPEAN BUTTONHOLE

Fragrant carnations, shipped all over the Continent, are the pride of this and other sunny towns in the hills near the Italian Riviera village of Bordighera (see pages 87 and 88). The sandal-shod girl has led her heavily-laden donkey from terraced gardens which he behind the beliried church and quaint stone houses. Red valerians grow abundantly beyond the old wall.



A tiny land-locked harbor suddenly appears as one drives south from Rapallo, and a line of houses curves like a bow-front bureau along the water. The hills form a green backdrop of olive trees studded with villan. Artists often rent the bomes of fisherfolk along the water front. A TOY TOWN IS PORTOFING ON A DREP BELLE ARM OF THE MEDITERRANEAN



Natural Color Photographs by Hans Hildenhrand SOLD STILL SOURRMING AND PLOPPING ANCHOVIES ARE

When sorted, they will be hawked through the streets of Bordighera by load-shouting venders. Some say the fish are most delicious when decapitated, immersed several days in olive oil, and then eaten uncooked. Her strong, craitswoman fingers wield the clothespinlike hobbins almost too fast for the eye to see as a spider-web pattern takes form over a pillow at Rapallo. The silk kereliief is a valued heirloom.





SASSO DI BORDIGHERA DROWSES IN A BED OF BILLOWING OLIVE TREES.

Where the Maritime Alps slope toward the Mediterranean Sea are rich groves of fruit yielding much of Italy's famous oil. From where the peasant girl sits side-saddle, the red-roofed houses of the viliage seem welded together.



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Natural Color Photographs by Hans Hildenbrund

FROM CAMOGLI'S WINDOWS LONELY WOMEN LOOK OUT TO SEA

The town's name means "The House of Wives," for graduates of the marine school here "up anchor" early in hie to man Italy's merchant fleet, leaving their womenfolk behind. From America, tradition says, sailors brought back the idea of tall buildings.



HOT BEACHES TAKE THE PLACE OF CLOTHESLINES

At Albissola Marina in the cold waters of a mountain stream gossiping women wash the family linen. The drying clothes are held down with stones. Excellent pottery is made here, and "Old Albissola" is in wide demand.

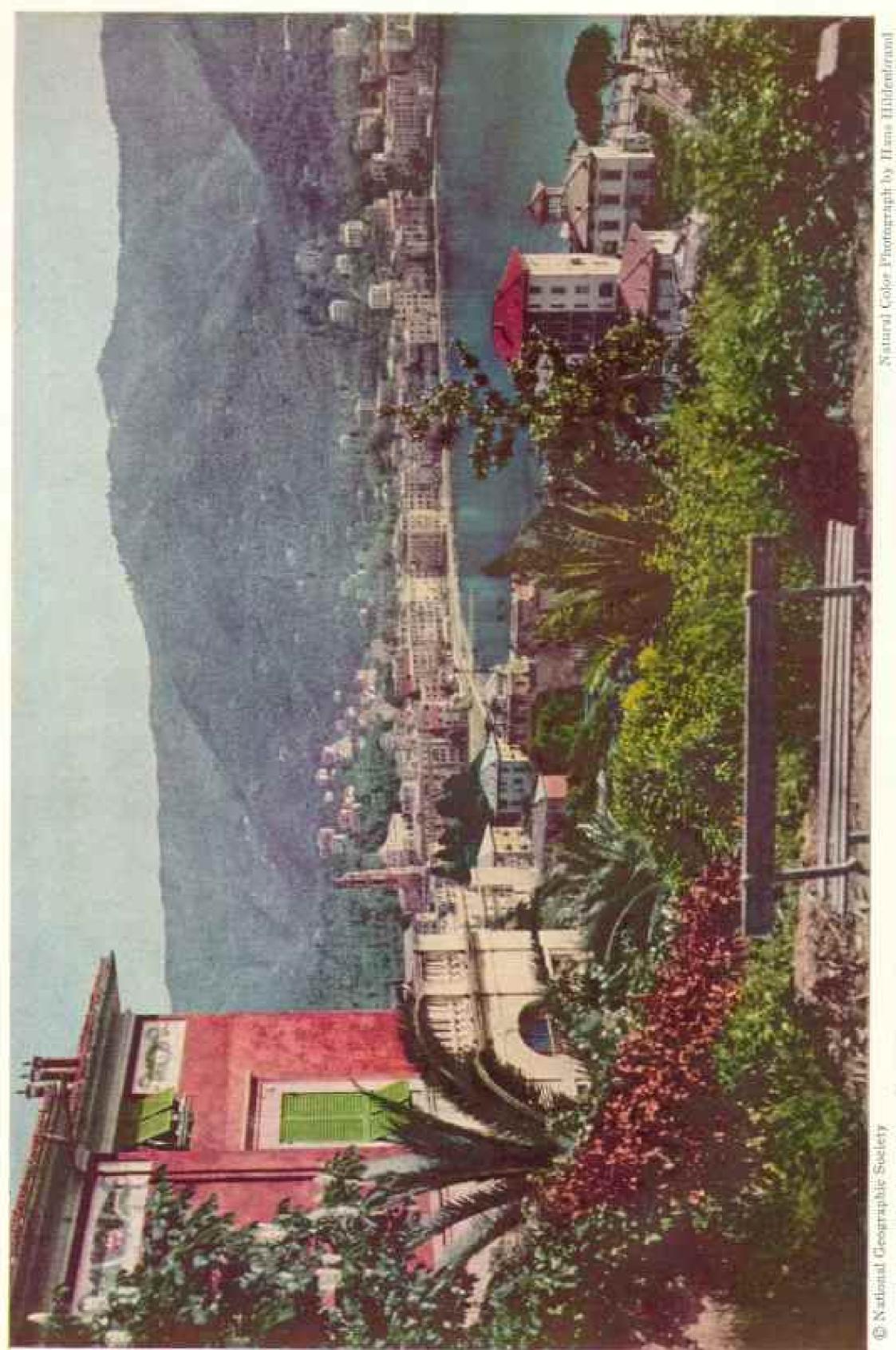


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Natural Color Photographs by Hans Hildenbrand

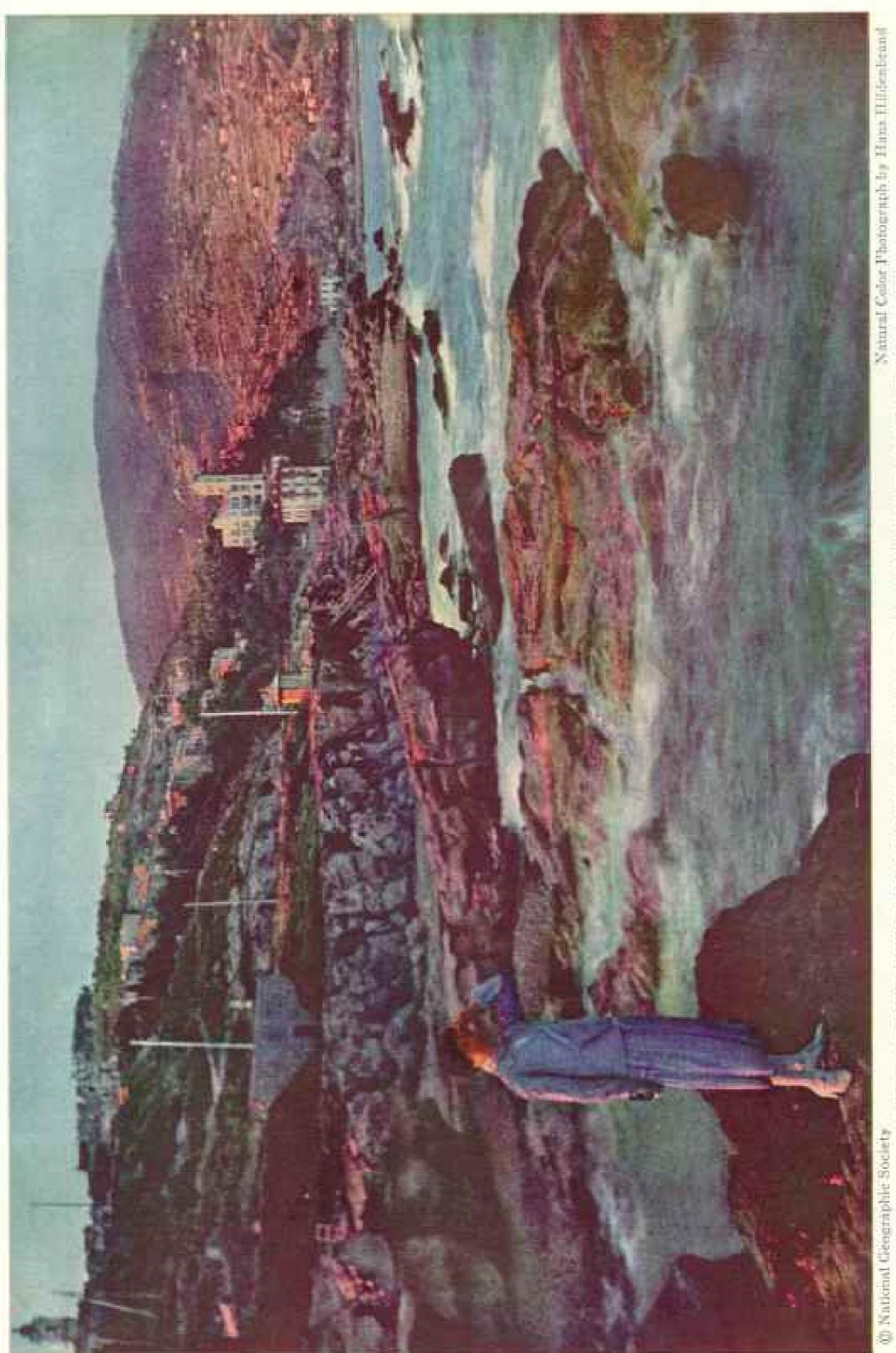
SAN REMO HAS BEEN CALLED THE MONTE CARLO OF THE ITALIAN RIVIERA

One who sees only the casino and the fuxury of villas misses the charm of the old town on the ancient Roman road from Gaul. A shrunken stream in a mossy bed meanders among orange trees and jumbled houses, some with outside stairways and flapping wash.



STATESMEN SOLVED PROBLEMS DETWEEN SWIMS IN THE BLUE WATERS OF RAPALLO

The old town scarcely sees the placid harbor now After the World War, Germans and Russians, Italians and Yugoslavs settled differences here. The old town scarcely sees the placid that many modern hotels have been built along the beach to accommodate Americans, English, and visitors from cold northern Europe, winter gardens are set like jewels on the alopes. Pilgrims come from miles around to the near-by shrine of the Madonna of Montallegro.



ear the church, but out of sight, is the spactous villa given as a home for World War widows by the uele HI. From terraced gardens in the distant hills come many frouds for Palm Sunday services A SETTING SUN WITH MIDAS TOUCH SHEDS TWILLGHT ACROSS THE HILLS OF BORDICHERA Even the rocks of the shore take on soft colors. No late Queen Margherita, mother of King Vittorio Emant in churches throughout the country. Exposed to the se-

a, the village is swept by bracing safty winds,



BORDIGHERA'S GARDENS ADD BEAUTY TO THE SEA

Framed in dark-green cypress and sprays of purple and reddish-brown Echium, the Mediterranean outblues the sky. A northern species of this flower, of European origin, is a familiar plant in parts of the United States.



Sational Geographic Society

Natural Color Photographs by Hans Hildenbrand

THE OCTOPUSLIKE ALOR BLOSSOMS WITH REDDISH RAMRODS

A tall agave at the upper left spreads its stender arms over a spiny yucca plant, while drooping palm branches at the right bow gracefully before a starch-stiff Norfolk pine in Ludwig Winter's renowned gardens at Bordighera.

deeps and wait all day for such prey. Having caught it, he makes a fire on the rock, cooks the limp, repulsive object, and cats as if at a feast.

STALKING THE SARACENS

Everywhere we drove our car we ran into the Saracens—their towers, their history, and their evil reputation. I have a weakness for them. They belong to that marvelous Mohammedan civilization that in the Middle Ages surpassed in certain things the culture of Europe, much of which was then undeveloped. They began the habit of leaping across the Mediterranean from North Africa when the first detachment of these able pioneers touched Gibraltar and proceeded to possess Spain.

And what did they there? They built at Córdoba a mosque, now a cathedral, which is still the glory of the city; they built at Granada a palace which still makes poets and artists of all who have the happiness to linger in its recesses; but they were routed by the people already living in Europe, and ever since have been branded as criminals and savages.

The people who drove them out were even less mannerly than they. This we learned at the marvelous village of Eze, on one of our longer drives. We were tired when we reached that point of the Moyenne Corniche (as the middle road from Nice to Menton is called) where the rock rises like a monument above it and seems to dominate sea and penetrate sky. There must be a restaurant, at least a cafe, to restore us, for people eat of necessity and in all places,

The car almost refused the mounting way which left the Corniche and pursued a terrifying zigzag. Far below the village the road ends in a face of rock. All the world is on wheels nowadays; but no wheels of any size enter Eze—only those of a hand-cart, perhaps, and the feet of men and donkeys (see pages 91 and 93).

Tolling up the slope with delight at every step, we pass through an archway. It is the city gate. No city opens before us; only a paved path, narrow and steep. There is not a yard of level walk in the entire maze of ways. Of real streets there are none.

Extended arms touch both side walls at once. One might be in a crypt, so frequent are the arched spaces through which one gropes. Yet from tiny windows above are bright eyes peeping and taking in every movement of the strangers. With curios-

ity? With distrust? There is historic reason for the latter.

A small terrace is braced up on the way.

It holds three tiny tables. Ah, food! A low, massive wall keeps the tables from falling down the cliff; the public way is one with the terrace, and a little doorway stands open to show a lusty proprietress.

She greets us in French, tentatively. We reply in Italian, also tentatively. It works, for she changes merrily and declares that 3 o'clock is not too late for luncheon. But amuse ourselves at the castle for an hour and return for a feast.

Because she knows as well as we that an hour is long to wait when one is famished, with deft hand she sets a reviving Dubonnet before us, then bows us onto the upward path. We get lost on the tunnellike ways and find ourselves before an open interior elegantly antique, with furniture and hangings of Gothic times, the house of a prince who likes to live in an eyrie.

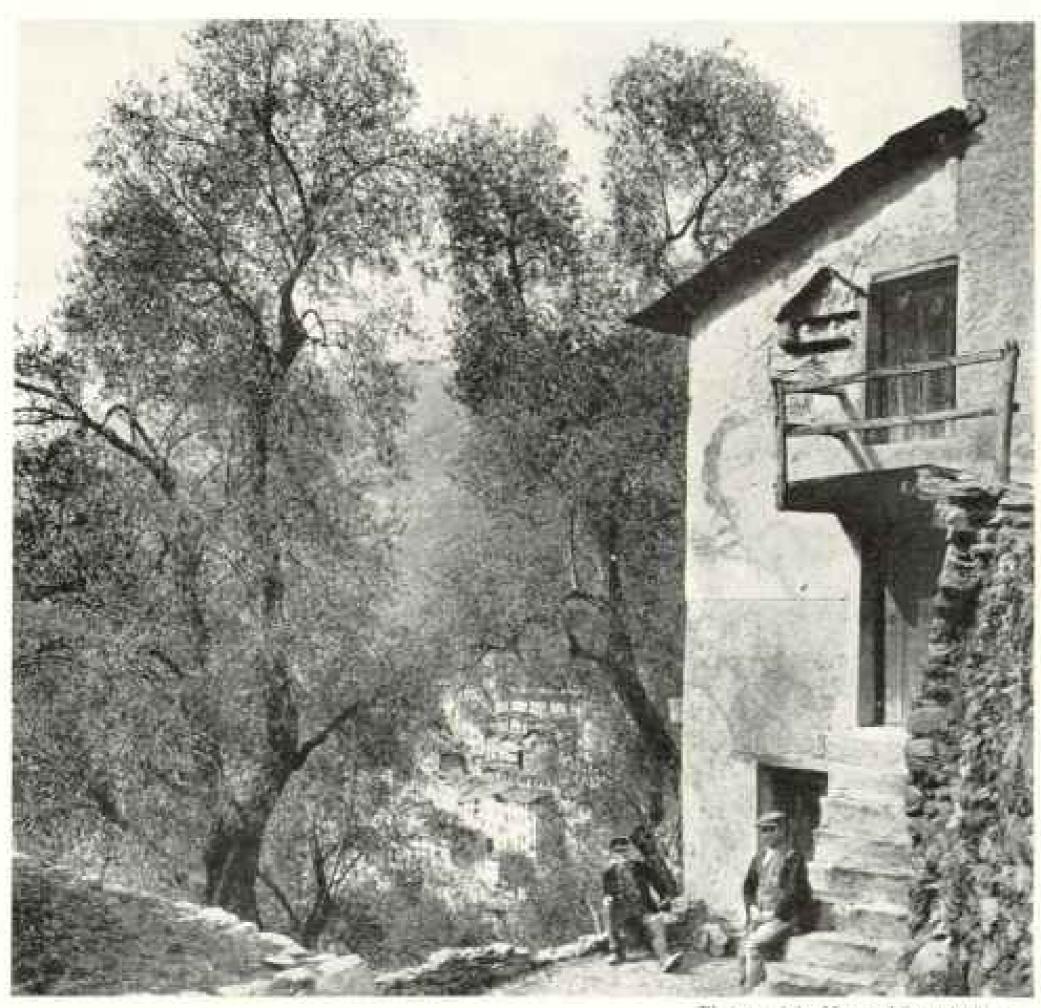
FIGURES COME OUT OF THE PAST

The castle at last, or rather its site, for the walls are nearly gone. Not so bad after all, for now nothing stops the eye; the view is from the mountains of the Esterel to those near Bordighera.

While I sat on the grass of the castle floor under the spell of the unreal sense of floating given by the immensity of sky and sea, dreams of old history came to me. In them the Saracens figured, for this had been one of their best-loved towns. From here they could look across the sea almost as far as their Africa and on every side could see the approach of friend or enemy.

One can feel the presence of those bold, skilled men, trying to make strongholds and keep them, that they might bring the land into the culture of those who held to the True Faith of the Prophet. "There is no God but God," they cried for the benefit of the heathen beyond these gray mountains.

No one in Eze now but a solitudinous prince and a few peeping peasants; yet, at the beginning of the 13th century, poets lived here, troubadours who loved and sang. Some three centuries later, in 1543, Barbarossa, the Saracen corsair, gazed on Eze from his galley on the sea and grew fierce with the lust of possession. To my mind that is understandable. But whereas I should like it for the peace and pleasure of my soul, he wished it as a strategic point and for looting.



Photograph by Maynard Owen Williams

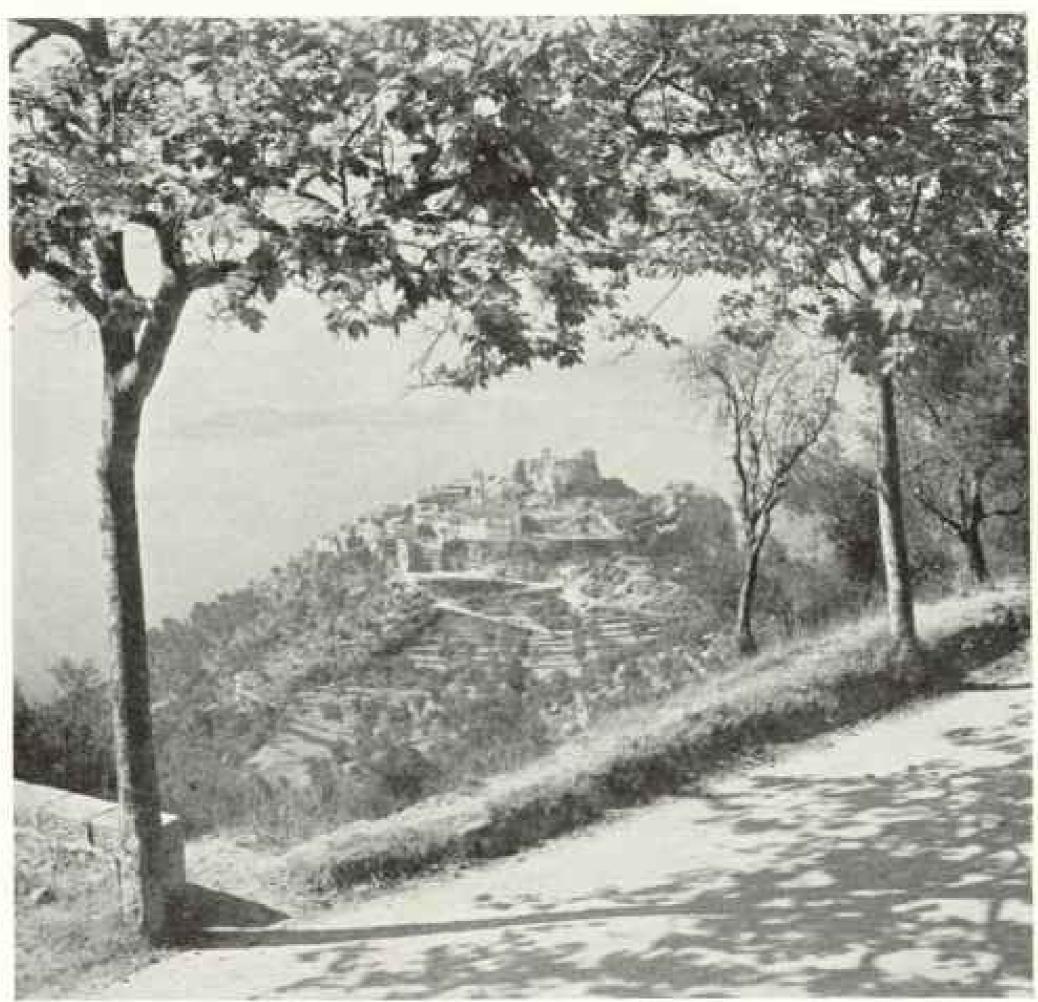
SAORGE CLINGS LIKE A SWALLOW'S NEST TO THE MARITIME ALPS

Set among silver-gray olive groves, this compact village dominates the spectacular motor road from Nice to Turin. Traditions born of strifes long since forgotten cause the homes to huddle together as if armed enemies, rather than peaceful gendarmes, roamed the roads. On the wall is discernible the weather-worn face of a sundial.

Seated at the high Castello ruin and trying to subdue an ignoble hunger, I fixed my
thought on a despicable inhabitant of Eze,
one Gaspard de Caïs, who betrayed the
place to Barbarossa and who shared in the
riches gathered up from a murdered populace. He sneaked up the heights from the
sea, with Barbarossa's French and Turkish
troops behind, and asked for the Governor
at the gate, the gate by which we had just
entered. He explained that he had brought
friends who would come and help defend the
village from any attack. Thus Barbarossa
won Eze.

Sun and shadow decked the restaurant terrace; there were vines somewhere. The table was clothed in white with gently fluttering corners, a vase of flowers, a dish of antipasti, a bottle of wine. All this and more the hour of our loafing had conjured. The principal dish was pigeons, young and tender, roasted, drenched with a wondrous sauce. With them a crisp salad; after them sweetest green beans. Then cheese, and fresh figs, and a bottle of sparkling red wine with dessert. Then coffee black as your hat.

Where did it all come from? Was the woman an alchemist in her tiny laboratory of a kitchen? Very simple: the squabs were in her pigeon house, the beans and salad still growing in her garden when we



Photograph by G. R. Ballance

EZE, PERCHED ON AN IMPREGNABLE CRAG, FELL TO TREACHERY

Sailing by in his galley, Barbarossa, the Saracen scourge of the seas, was attracted to this cyric castle as are motorists to-day. Its steep hills, ably defended, thwarted his designs until he found one of its citizens who, promised rich loot, led his sailors into the city (see text, page 89). A steep road rigzage up to the gate, but no wheeled traffic has yet invaded its "streets," The distant head-land, Cap Ferrat, long a winter playground, is now frequented in summer.

arrived. And had we not given her an hour? But she was as proud of her feat as we were happy.

HILL TOWNS BECKON

Unless you slip into all the crannies of the Riviera mountains you miss the wonders of the world: the hill towns of beauty and antiquity and of an astounding ability to cling and persist throughout the centuries. Saracens have left marks upon them. Their square towers tell of that, and rival in interest the tall, thin towers of the campanili of the churches.

Every place where a little stream runs

down from the heights to the sea the indefatigable hill-climbers of the mid-centuries built towns of close-packed houses. It makes one marvel how they could endure the constant climbing. Alas! these towns were all places of defense. A man usually killed on sight any man he met outside a town's shelter; and a town on low ground was as defenseless as a shelled oyster.

To give sustenance to towns on the summits, the slopes were made suitable for crops. Thus came those wonderful terraces of the country back from the sea made graciously important with vines and olive trees. They are all the work of



Photograph by Magnasii Owes Williams

CROTESQUE "BIRDS" RIDE DONKEYS AT CARNIVAL TIME IN MENTON

Riviera beauty parades feature fair faces and flowers, but King Carnival's mad subjects mask themselves in papier-maché. All the failings of mankind are caricatured by jolly revelers who wear huge heads. At the feet of giant ogres carried on floats, smiling humans dance like puppets.

Italians, the Italians will tell you, for they are proud of their labor on the land of France that once was theirs.

It is a delicate subject, and a delicate situation still exists among the little people in parts of the Riviera. They are Italians in heart and custom and tradition, but French by law and language. They do not always speak to you in their own tongue until sure you are not French. In Menton you see it plainly; they are so near to the border.

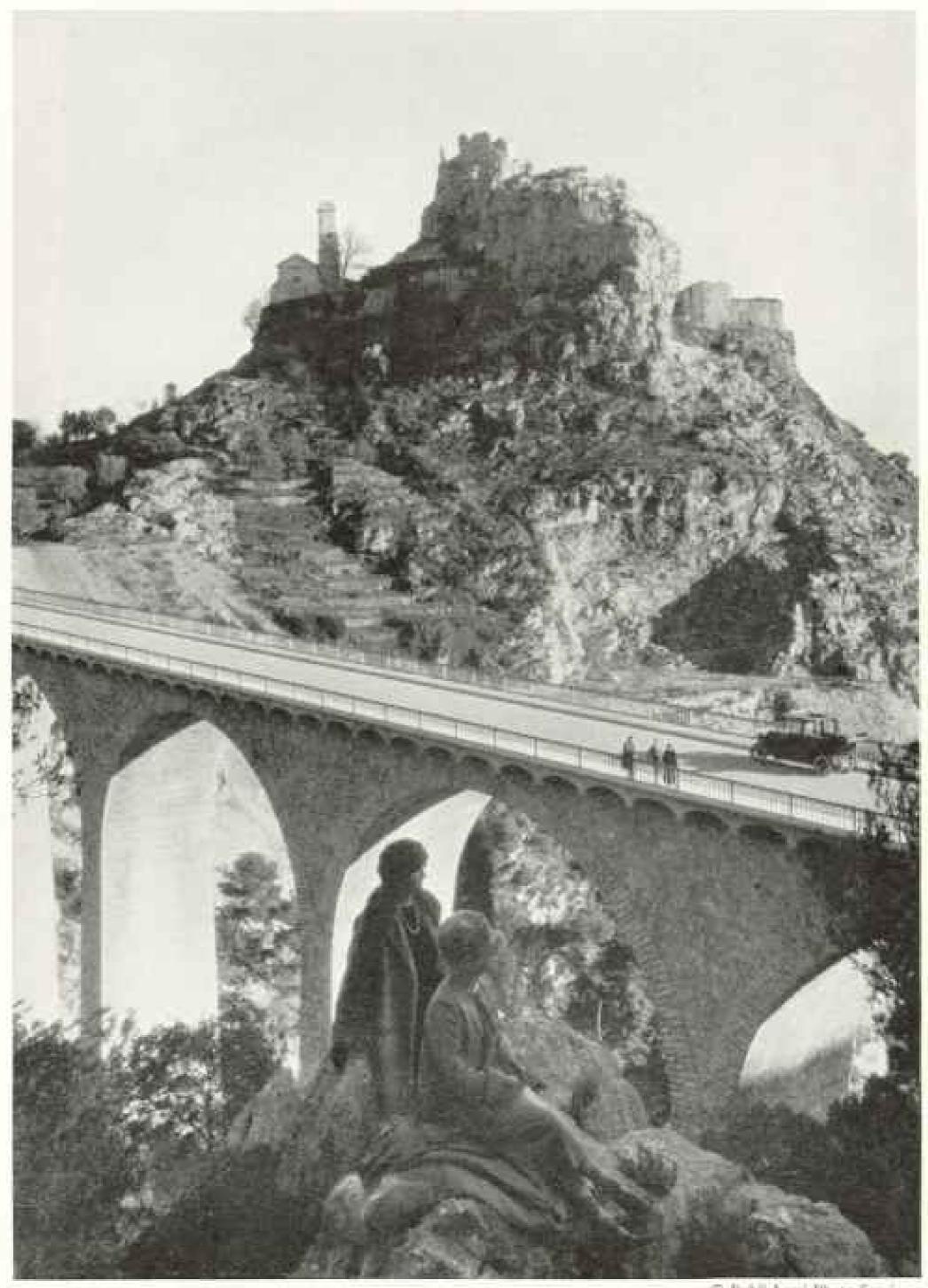
THE EVOLUTION OF WINE

Some of them feel strongly about the laws that keep from them their own loved wines, which come to Menton's harbor but may not be unloaded—no, not even so much as one bottle out of a cask. It all goes to a big French port; it pays a high tariff; then the casks are rolled off to a bottling factory, where the wine is prepared for the vin ordinaire of the retail trade.

But though we may not buy at first hand the velvety red wine or the golden white, we may sometimes find a friendly captain who will ask us to drink a tumblerful with him.

Obsessed with the love of valleys and hill towns, we tested the car for hill-climbing. We gave it a trial on a run to the castle of Roquebrune (pages 76, 98) and to Gorbio, that little town back of Roquebrune, which is on the way to nowhere, which has no land for gardens, no water save a fountain on the plaza (see illustrations, pages 71, 99).

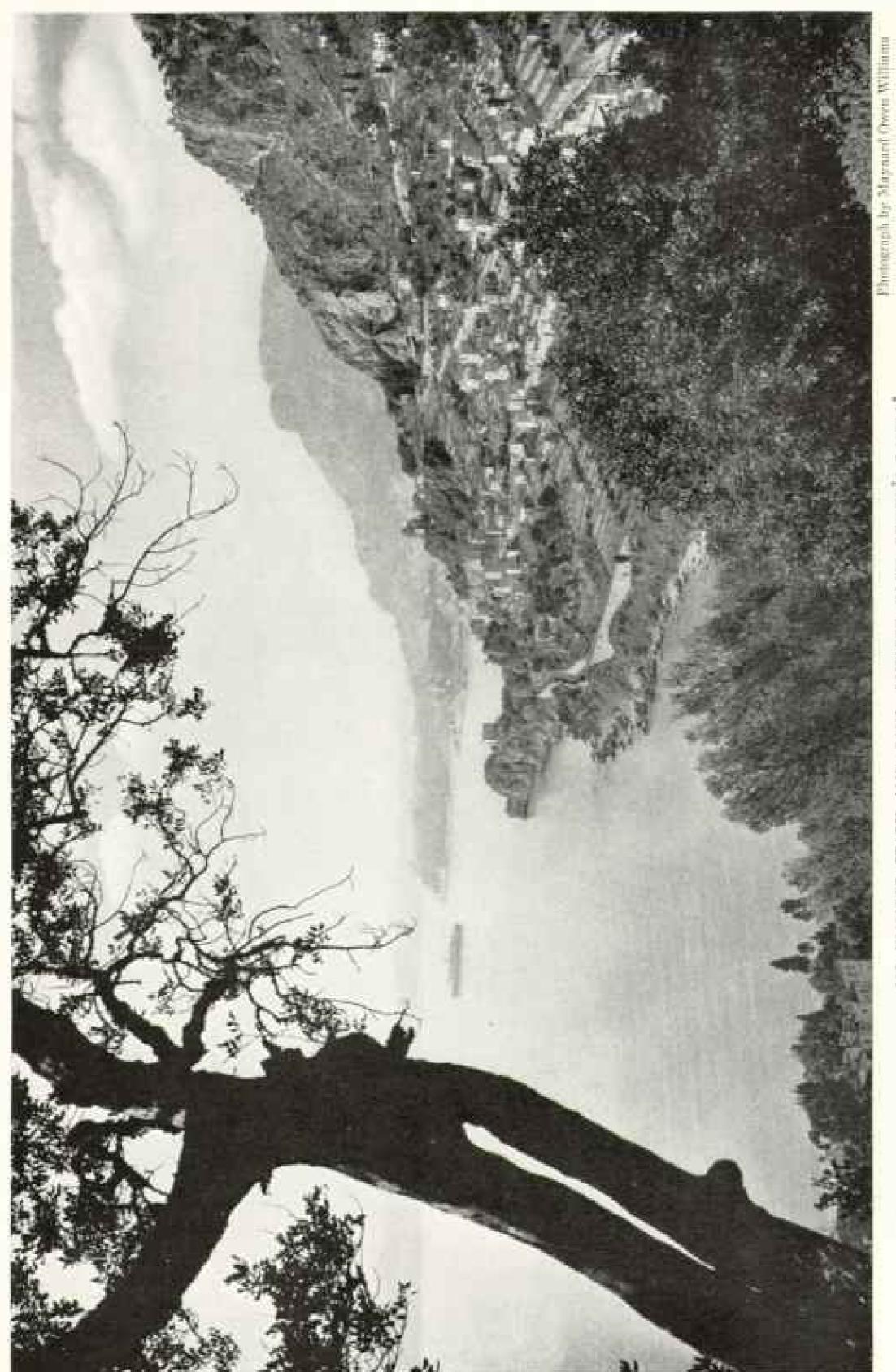
That plaza polices the place. Only through it can one reach the houses, for all houses are a little above it, through a single archway, and all vehicles must



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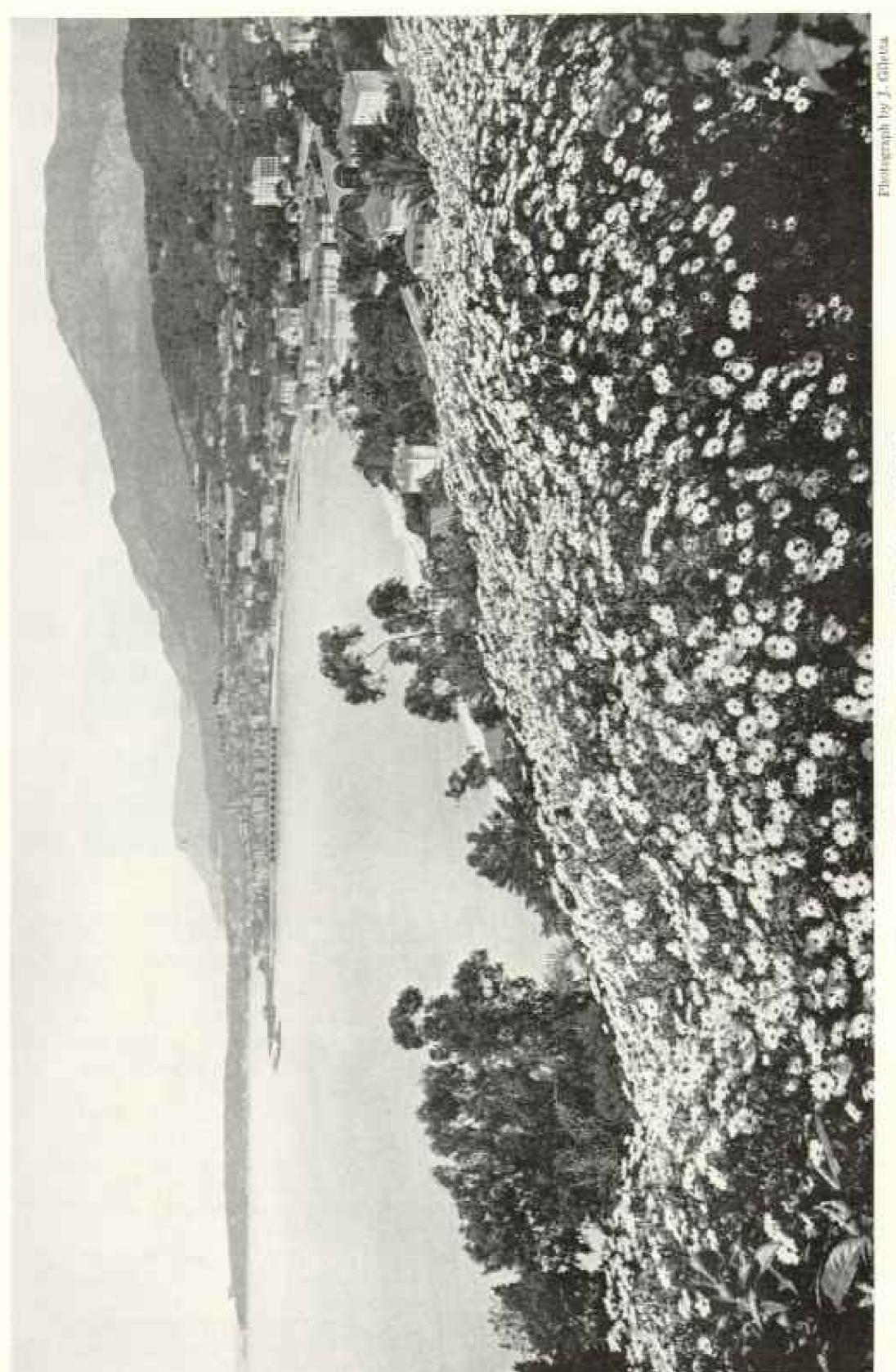
THE CASTLE-CROWNED ROCK OF EZE RISES LIKE A HUGE PYRAMID ABOVE THE MIDDLE CORNICHE DRIVE

Meager terraces and vineyards cling to its rocky sides, which mount steeply from the sea. Towers and crambling walls pierce the sky. Little wonder the Saracen "Redbeard" coveted this stronghold and made it a favorite fortress (see pages 89 and 91). Three superb Corniche roads, famous highways bordering the "coast of the setting sun," pass Eze on different levels.



NO WONDER ITALY AND GAUL COVETED EACH OTHER'S LANDS!

ry followed the ridge which runs down from the Alps to Memico. Across the border, Italy looked upon the helow Requebrune, includes Manico, with a cruise ship in the outer harbor, and the Tête de Chien, the sheer spread fruit and flowers upon the rocky seaward bastions of the Maritime Alps. Before Augustus extended his frontier, the ancient boundary followed the ridge which runs down from the Alps to Menneo. Cote d'Azur, Gaul upon the Italian Riviera. This view, from helps Roquebrune, includes Monisco, with a cruise ship in the outer bluff against the distant sky. Laboriously constructed terraces spread fruit and flowers upon the rocky seaward bastions of the M



MARGUERITES BRIGHTEN A WINTER VISTA OF MENTON

This region is one of the warmest on the Riviera, and lemons, oranges, and flowers abound all winter long. Stretching toward the left, in the middle distance, is arbitrarile to the North Cap Martin, hiding Mont Carlo. Above rises the fortifications near the Franco-Italian frontier.



Photograph by Maymard Owen Williams

HISTORY'S MANTLE ENVELOPS A CLOSE-BUILT VILLAGE

Obscure Sospel, resort of curiosity seekers and golfers, was once Rome's spearhead thrust into the rocky flank of Gaul. In medieval times it was a walled cathedral city. Its old bridge crosses the Bevera, whose mountain waters roar with torrential strength during flood, but become a mere trickle in the dry season.

stop there. Only the donkey and the human family with whom he lives may pass up the narrow cobbled way. Again one feels like a wanderer in a crypt among those passages so often tunneled under houses.

More happy is the plaza where all the populace comes to the fountain. We dined at an inn which faced the square and looked like any smallish inn of a city street. But the charm of it thrilled us when we were shown our table. It was at the back of the house, on a vine-covered terrace looking down on a long, entrancing valley 300 feet below. We could see a girl in a bright frock down there gathering ripe figs and grapes for our feast. The sun was leaving the deeps of the valley to the enchantment of advancing twilight.

One evening at dusk five bicycles stole softly along the shore road below the house, exciting immediate interest as I looked on them from my little garden terrace. If you have a home, even if you are an alien, everything that happens near it has a delightfully personal value. These five bicycles were manned by stalwart youths and packed large with luggage.

The young men peered over the sea wall as they came along at a crawling pace.

They stopped. A tall blond chap leaped upon the wall and dropped down on the beach. His bicycle was lifted over, all the bicycles, in fact, and the beach became a lounge for long-distance travelers.

They could not camp there; it was against the local rules. An officer pursued the nasty business of preventing any such joy. Did they know it? I hoped not. Later I suspected they did, and I chuckled with mischievous delight at the way these traveling boys gained their point.

You could not tell whether their method was innocent or wily, so simple it appeared. When the road officer lounged by on his last round, they were boys smoking and ruminating beside a sea left luminous by the afterglow. Only one inconspicuously pulled things from a bicycle packa frying pan, a coffeepot, an alcohol stove. No fussing. They all lay quietly until the meal was ready. I could

see it was plenteous. I could see the haste of hunger and its gradual slowing down. Smokes again, but not until all kitchen effects were tidily effaced.

WHO CARES FOR RULES?

What now? They could not spend the night; yet, if they rode on, the coast showed no other beach, only rocks and cliffs for miles and miles. I longed with all my heart to see those fine boys defeat the silly law that would compel them to spend their scant coins for some wretched lodgings. I had my wish. Peeping in the deepening dark, I discerned the rising point of a pup tent. How delightful! They felt it worth trespassing to lie beside a whispering summer



Photograph by G. R. Ballance

SUNLIGHT AND SHADOW AT SOSPEL

Beneath the arches of thick-walled houses splashing fountains add their peaceful note in a quiet town which long knew war and plague.

sea with a waning moon to make sparkles through the night. But the morning—and the police?

The beach was empty when I rose at 5 for our own journey in the hills. Clever boys!

In our car we left Bordighera for Menton (see pp. 77, 79, 81, 83, 87, 88, 92, 95), fought our way through the irritation of the border laws and on into France, taking the valley road. That road is a laundry for the first mile. Signs tell you that the little stream that meanders through a plain of gray pebbles is a "torrent"; but it really is a laundry. Women are there at the crippling work of washing clothing in icy water while kneeling above it. Whoever thinks it merely picturesque should try it (see page 85).



Photograph by Micrard Owen Williams

THE TRICOLOR NOW WAVES ABOVE THE CASTLE OF THE LASCARIS

Roquebrune is dominated by the medieval fortress of this family, one of whom was Emperor of Constantinople. The fountain supplies a part of the town with water, but detached villas have their own tanks.

The valley is left necessarily by reason of the mountains closing it in. That forces the tricky road to zigzag up the steeps. Cars take such turns at such grades as make sick the heart of any but the venturesome. Every turn seems it must be the last one before reaching Heaven's gate; but up above are other zigs and still more zags, and a glimpse of a railway thrown on arches, that from pure joy takes a prankish horseshoe turn out into space.

A LOFTY STRONGHOLD

High, high above sits Castillon, which must have dropped from the sky onto its otherwise unattainable heights. They say it was a Saracen stronghold. Poor Saracens, who had to protect the Prophet's people by such hard shifts!

As we turn the last corner we look back. There lies the blue sea, apparently directly below and unspeakably beautiful. A few more turns and there is Sospel, lying over a wide green valley almost as if it were in Lombardy (Lombardia) (see illustrations, pages 96 and 97).

ANOTHER RESTAURANT

Factories smoke and locomotives scream and puff at a station. There are streets and hostelries, a golf course with a botel beside it. Not to our taste. We slide through on the way to Tenda, mounting more and more and becoming intimate with peaks.

A sign, half hidden beside the road, tells that rabbits are for sale, and that a restaurant exists somewhere in the mass of greenery below the road. The car turns in at the gate and stum-

bles crazily down the wicked grade of an erratic drive.

With piquant transition, we are on a level sweep of green lawn before a large white farmhouse, not a Riviera house at all, but one reminiscent of northern lands. A brisk little host comes welcoming, not as a servant but with worldly elegance.

"Déjeuner? Colazione? Luncheon?" We tried all three tongues, and he replied in all, laughing like a jolly gnome.

"Look at the little gorge with the waterfall, take an aperitif at this table, and my wife will have you quickly served." And thus we stumbled upon beauties untellable and learned of the way two old people settled the problem of existence.

He was from Bavaria, an inventor; she was French bourgeoise. The fight for a living grew too tense after the World War, They gave up urban life, bought this land beside the glen, put up a house, and lived on what they could produce. Oh, but his manners were charming, and oh, but madame's dishes were worthy of a blue ribbon!

They served us under the plane tree, whose low branches spread like a green ceiling within reach of an outstretched hand. And there, around the table of shadow and sun, the man and wife of the isolated life grew confidential, told us their story, and then warmed into something very like friendship. Not time-wasting, that stop of two hours.

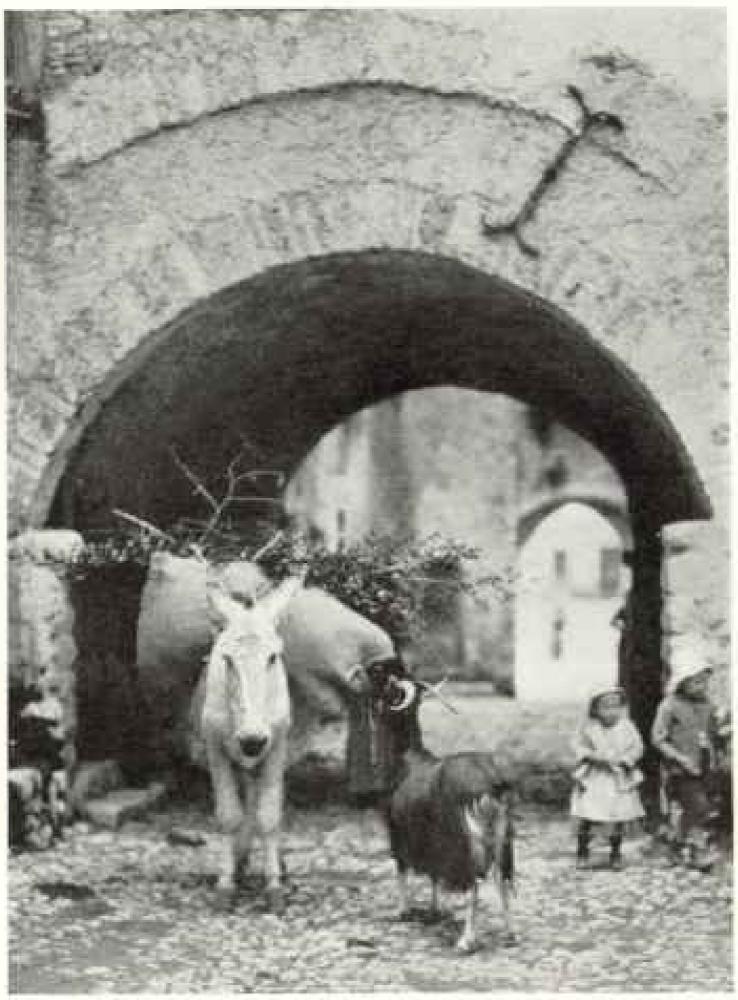
THROUGH THE TENDA PASS

In a lonely rocky landscape of the higher

mountains the road, like an alpine train, suddenly pops into a tunnel. Such a surprise was that big round hole with a little round hole at the far end of it, and a sloppy, dripping passage through its long mile. It was the tunnel which pierces the Colle di Tenda.

We entered in bleakness; we emerged in green gaiety. We entered from a deserted vista of uninhabitable rock; we emerged upon the central point of a gay and busy Italian village that has probably not changed for hundreds of years.

Its church has the tall campanile from which the bell swings out as it rings, as if to observe its effect on a populace which



Photograph by Maynard Owen Williams

THE GOAT, FEEDING ITSELF, LIGHTENS THE DONKEY'S LOAD

This informal picture in Gorbio is framed in one of numerous arches, through which undulating streets serve the many levels of the old hilltop town (see text, page 92).

always shifts about at its clanging. Its streets are narrow and shadowy, with houses of many stories, although there is surely room in all that country for homes nearer the ground. Bright color is everywhere, on the children's cheeks, on the forms of laughing girls, on the lines of drying wash, in the flowered windows. We are in Limone Piemonte.

ROYAL VISIT AT TUNNEL OPENING

A tablet on an untidy hotel at the tunnel opening tells that on the grand occasion of the opening of the Tenda Tunnel Their Majesties the King and Queen spent the night in that inn.



"ALL OVER ITALY THEY SING (AND SERVE) SO PRETTILY!"

An Italian restaurant is a family affair. Father is the best and the musician; mother is the cook; daughter, of an intelligent amiability, is waitress; and all at times approach the table on excuse of serving a specialty. A bench or two along the cement walk outside holds grandma and half a dozen crones, some with their children's children in worn perambulators.

At the far end of the village is a surprise—a hotel of the highest class, with every luxury for a clientele both wealthy and fashionable. Limone Piemonte is a winter resort for the new rich of Italy.

We flouted the elegance of the new sporting hotel as being out of the class we had adopted, but the untidiness of the hostelry which had harbored monarchs drove us back to it. We dined on brook trout which an hour before had been frisking in the pure cold water of Limone's river!

The road goes on, goes on, if you like, to Milan (Milano), and north to the enchantment of Lake Como, with its Villa d'Este at Cernobbio; to Stresa, on Lake Maggiore, and near-by Isola Bella; but we are getting too far from Italy's Riviera and my friends, the "little people."

INDEX FOR JULY-DECEMBER, 1934, VOLUME READY

Index for Volume LXVI (July-December, 1934) of the National Geographic Magazine will be muiled upon request to members who preserve their copies and bind them as works of reference.

WHERE THE SAILING SHIP SURVIVES

By A. J. VILLIERS

AUTHOR OF "ROUSEINSE THE HOLY IN A WIND JAMMER" AND "THE CAPIC HOLY GRAIN-SHIP RACE," IN THE NATIONAL GROUNDING MALADREE

The breast of Finland swells towards the Swedish coast, there are 6,000 islands, to which belong all the surviving big sailing ships in the world; or, to be more exact, there are 6,554 islands, rocks, islets, tree-spattered specks of sea-encircled territory whose name is Aland and in whose small ports as I write are registered 26 of the surviving square-rigged ships in commission in the world. Altogether, there may be 31 now, counting a German, two Swedes, an American, and a Dane.

Aland is Finnish; but its people are Swedes, speaking Swedish. Their colors are the blue and gold of Sweden, though the white and blue flag of Finland floats officially from Government House. The strange cadences of the Finnish tongue are little heard here, though by law Finnish is taught in the schools and in the nautical academy.

The Finns have their own name for the islands, in their own language: to them they are Abvenanmaa, and their capital of Mariehamn (which is Maryport in English) becomes Maarianhamina.

THE MAGIC OF A NAME

I first saw the name Mariehamn upon the counter of a four-masted bark in Port Adelaide early in 1921. "Mariechen— Mariehamn," I read upon the bark. Mariehamn? Where was that? I was in a little Scots bark then, discharging timber from south Tasmania; but within a year I sailed in a four-master with Mariehamn on her stern, and sailed in several such over many years—Lowhill, Grace Harwar, Herzogin Cecilie (see page 106).

However, it was not until 1933 that I saw Mariehamn. I went there then from the four-masted bark Parma (see illustration, page 114), that had drydocked in Copenhagen on her way to the far north to load timber for London, after she had come from Australia in 83 days. I saw first a low island emerging from a rain squall; on it was a lighthouse—nothing else. It was so low it looked as if an angry sea might have swept right over it and obliterated it from sight (see map, page 105).

Had there not been a lighthouse there, by night it would have been invisible. It bore no trees, no habitation. It seemed about a quarter as big as Times Square, in New York City.

ISLANDS, ISLANDS EVERYWHERE

The ship sailed on; soon there were more islands, low and rocky. Then there were many more; a large one loomed in front. We were among them, sailing perilously near. The pilot came, in a fast motorboat with "Lots" (Swedish for "pilot") painted on its side and lots of pilots on board, too. All the pilots from the station had come. There is little enough for them to do, ordinarily; not many ships come to Mariehamn, and those that do know their way there.

Now pine-clad islands were ahead, astern, abeam, all around. Still, on them I could see no habitation. They were low, the highest not a hundred feet above the sea. The pines came down to the water's edge. It rained and was cold. We anchored to one bower anchor. It dragged. We put out two. The mate cursed.

"Dis is Awland," the captain said with a broad grin of approval. "You like it?"

I didn't very much, on first glance from among those windy rocks; but I didn't say so.

"It is my home," he said,

Customs men came and shook the captain by the hand. They drank a little whisky and went through the ship's stores; and the young mates took some of them aside and were told the best way to bring some goods ashore—sugar, and coffee, and flour, and suchlike goods. The ship chandler in England had given them to the steward and the mates. It is good business for a ship chandler to keep in with Aland mates, for Aland mates will very soon be masters, and ships' masters order stores.

SIXTY YEARS REPORE THE MAST

An old man aged 73 came out in a motorboat that was very small, though we anchored in the open and it was blowing and raining hard. He had grand white hair and a complexion of red and chestnut. Straight-backed and oilskinless he sat in



Photograph by Uno Markström

THE PRESIDENT OF FINLAND TAKES A TRICK AT THE WHEEL

On a recent tour of inspection, President Svinhuivud visited L'Avenir in company with Gustaf Erikson, the shipowner (right; see text, page 118). In the veins of many sea-roving Alanders flows the blood of the ancient Vikings, who, on raiding trips to Finland, camped and hunted on the islands and buried their dead here (see page 110). Near Godby village and elsewhere their graves can still be seen.

the boat, and he smiled at our captain as he came; for they had sailed together 20 years before, when our captain had been a youth and the white-haired man but 53.

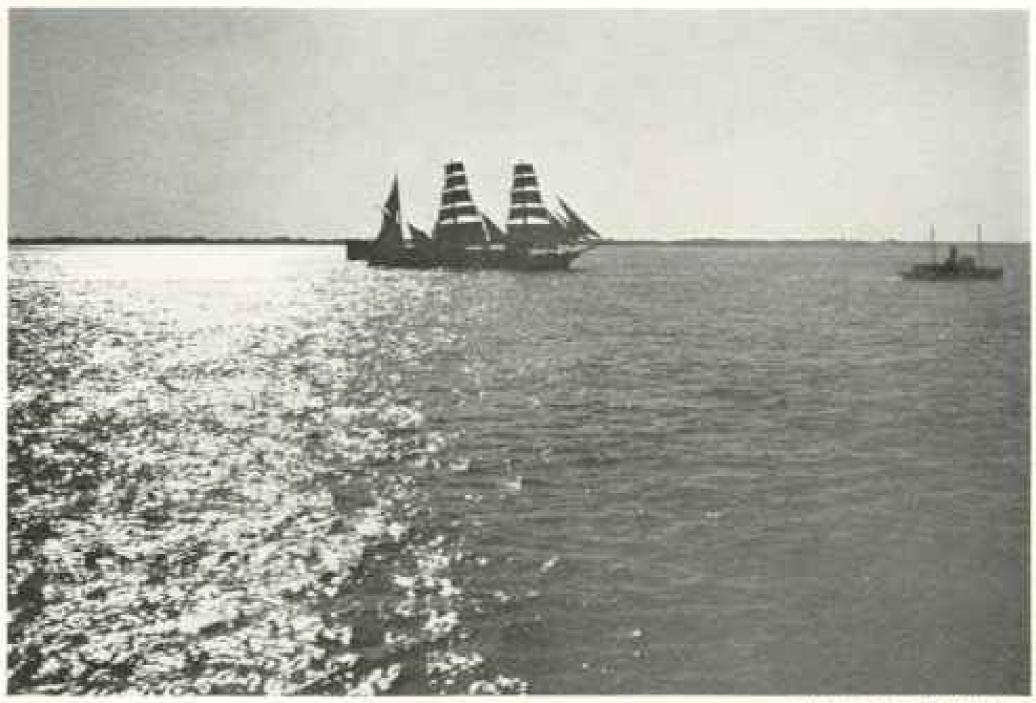
"Walfrid!" said the captain.

Walfrid came climbing up the high rope ladder like a boy. For sixty years he had sailed the sea, forty of them in command, and he had never been in steam. He had been master of clipper ships, of proud four-masters and big barks, of full-rigged ships in the Cape Horn trade, old and brought to Aland. He had been retired then about five years. All the summer through he sailed the waters of his native isles in a little boat, fishing for flounders and listening to the rippling of the water.

And here he had come, first out to welcome the new ship and the old master. He had a brother two years older. His brother was harbor master of the port and would also have come, but he had been knocked down by a blundering automobile in the main street a few days previously and had broken some ribs. A torn rib had entered one lung. He was waiting on the wharf, inside.

Tough old men! They were grand old men, too, Walfrid and August Gustafsson, with between them a century of serving ships and the sea. Aland born, Aland bred, Aland raised, Aland taught, they had sailed wind ships their lives long and always sailed them well. Now each of them had passed that threescore years and ten allotted to humans of lesser mold.

Later I was in their homes and saw the bright walls adorned with the paintings of



Photograph by A. J. Villiers

THE "PROMPT," OUTWARD BOUND

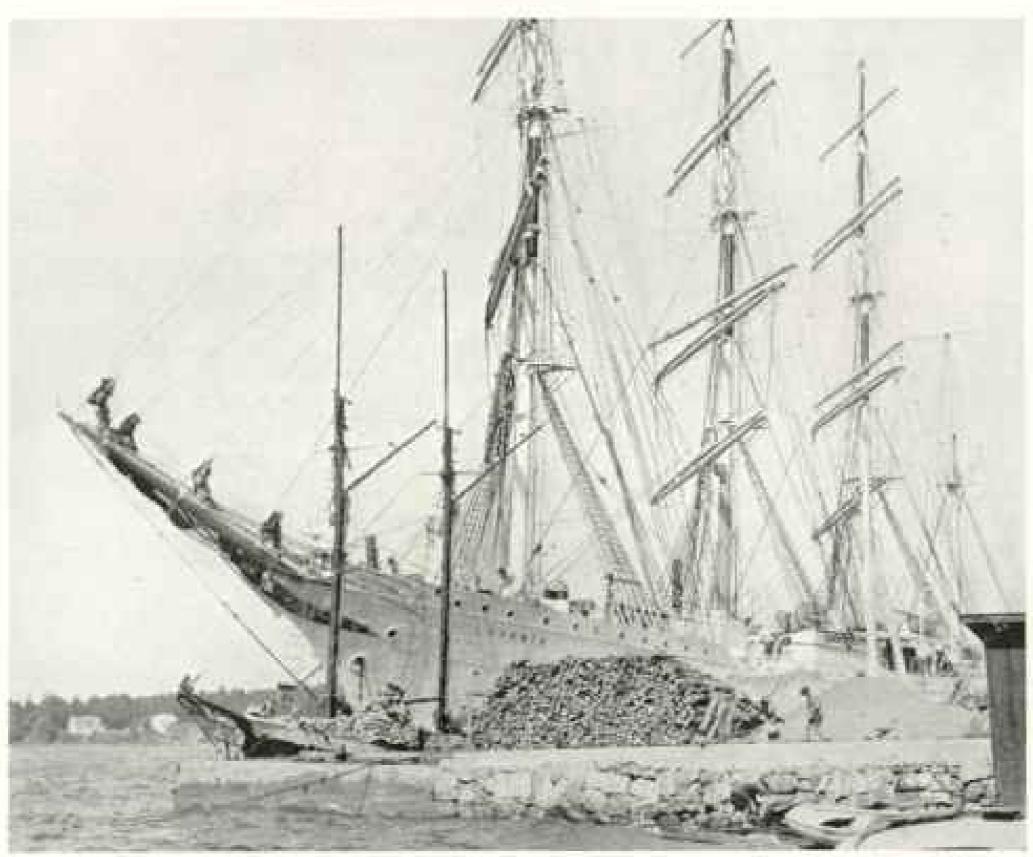
This Aland bark is being towed through the island channels on her way to London. These smaller vessels carry timber through the spring, summer, and fall months and are laid up in Mariehamn during the winter. The tags burn wood and even excursion sailing ships sometimes stop to pick up a deck cargo of wood.



Photograph by Gustav Heurlin

MAKING HAY WHILE THE SUN SHINES IN THE ALANDS

Frost-free from May to September, people on the 80-odd inhabited isles work hard on stony soil to grow rye, barley, and vegetables enough to support themselves. Dairying and fishing add to their food supply. They also grow hay and export some flax, fish, butter, hides, and salted beel.



Photograph by A. J. Villiers

HOWEVER HAUGHTY A SHIP'S FORMER ESTATE, TO-DAY SHE MUST WORK, EVEN AT WOOD HAULING, FOR THRIFTY ALAND SKIPPERS

This vessel, German-built for Belgian owners, was for many years a training ship for the Belgian Merchant Service; but, like almost all of the square-riggers in the world, she now belongs to Aland. In summer L'Apenir often makes tourist cruises about the Baltic.

full-rigged ships, barks, and the like, billowing under their clouds of sail, imprisoned now within gilt frames, yet still turning the blue sea back from their proud bows in protesting foam.

Somehow, inside those rooms there came the crying of the wind on the broad ocean and the orders of stout mates, and the energy of nail-hard boy mariners fisting mad canvas off the frigid Horn. The big ships, careering under their canvas inside their frames, followed one another around the walls, sailing there when they had disappeared from the ocean forever.

SHIPS OF HONORED MEMORY

The old captains talked—not much. "I was in the Mermerus then," I heard; or, "That was when August had the Lucipara..." Mermerus and Lucipara! There was a very romance in the sweet-sounding

names; these had been great clipper ships. Had they ended their days in Aland, too? Indeed they had, I learned; they and many more of their kind. And ended their days with honor, well.

I did not know at first that we had reached the town when they said, "This is Mariehamn."—"Where?" I thought. There didn't seem to be anything except a quay with a little steamer painted white, and a German yawl with the swastika flying from the foremast; and along the strand a four-masted bark painted black, with a lot of her yards and her rigging down.

We had come around a point between two islands, and now I could see signs of habitation; on a high hill—maybe 300 feet; perhaps not that—the harbor pilot station, with a flag; and near the four-masted bark a big house painted white; but I saw no town.



Drawn by Newman Burnstead

IN PORTS OF THESE TINY BALTIC ISLANDS THE SAILING SHIPS SURVIVE

Formerly belonging to Sweden, the Ålands were ceded to Russia in 1809 and remained Russian until Finland became independent in 1917. Then they were claimed by both Sweden and Finland. Later Sweden relinquished her claim, under a League of Nations' compromise which provided that the islands should remain Finnish, though self-governing and unfortified. This agreement is historic as the first League of Nations' settlement of a major territorial dispute.

We landed at the quay where a little schooner was lying with a load of wood. Across the way, above the pine trees that were so reminiscent of Maine, I saw the masts of barks rising above the trees, as if they had grown there with the trees, their roots in the soil where they belonged. But where was the town? This was Mariehamn, they said (see illustrations, pages 107-8-9, 117).

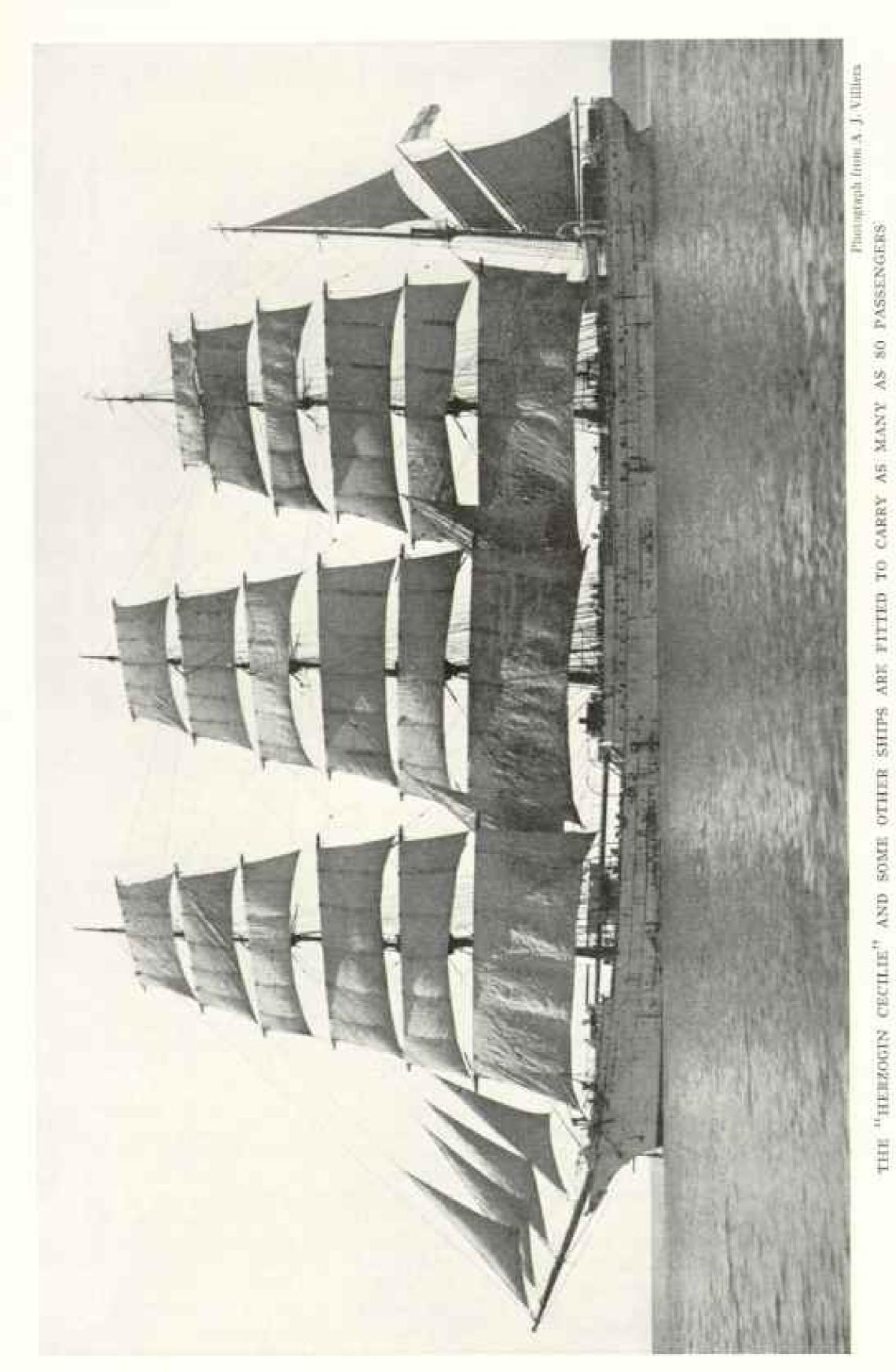
MAIN STREET IS A LEAFY BOWER

We climbed an incline, past a maypole round which four yachts gaily chased each other in the wind, and garlands that had been spun in May flying with them, and over all the Aland colors, gold and blue. Then we came to some houses and a wood; and some more houses and a great wood, down each side of which a road was made and in the center, under the trees, in shade and peace and loveliness, people walked. It was the main street, they said. Main street? What, this parklike forest with lanes? "Yes," they said, "it is the Esplanade." And a beautiful main street it was; I wish that there were more like it!

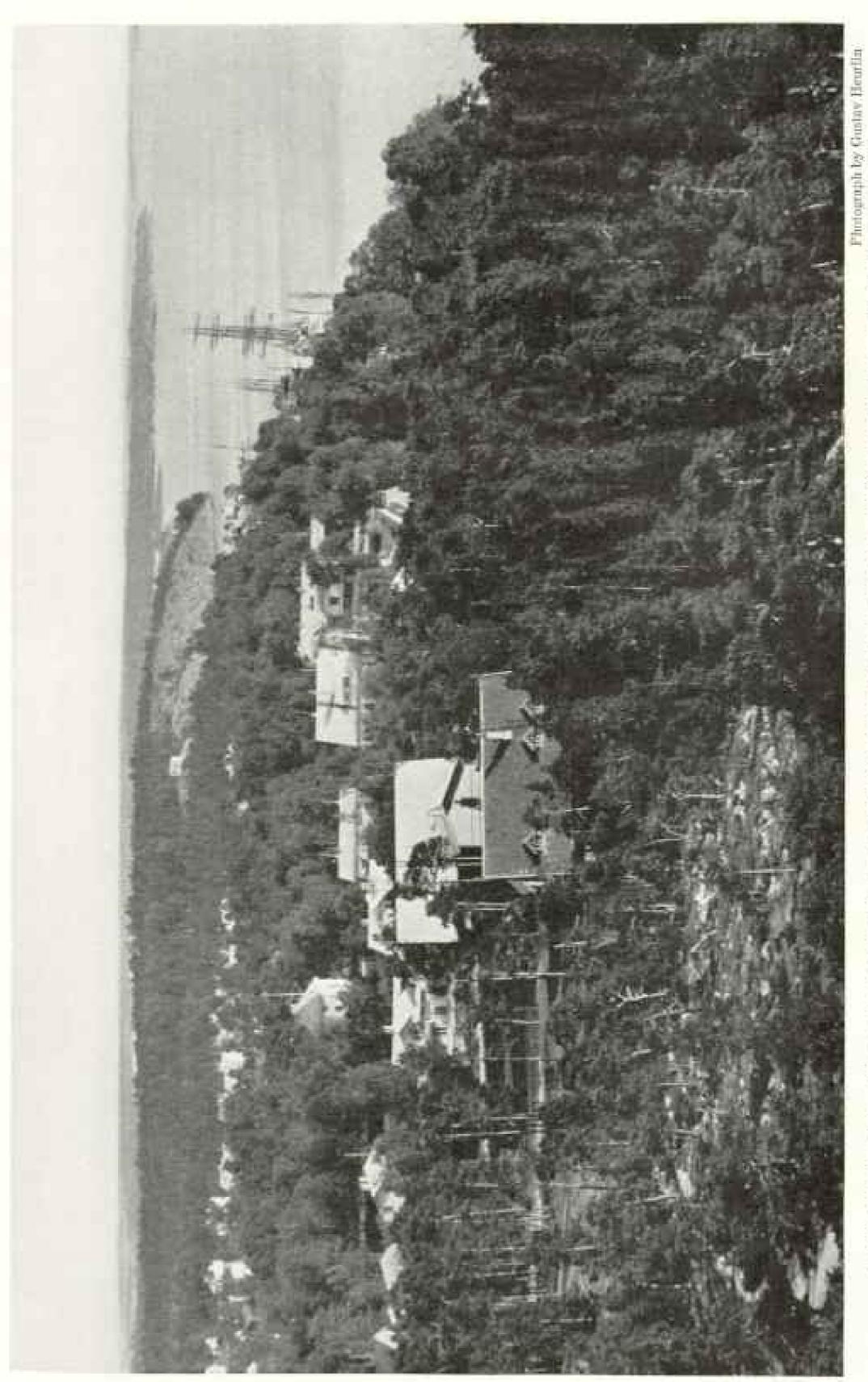
I walked along among the trees, past rows of clean and spacious houses.

Here this shipowner lived, there that, they said. Here Herr Kapten Troberg, who had owned so many ships, but was now retired; that was his home, that white, clean place of trees and wood, with the big windows drawn sideways to the Esplanade, as if the owner did not go there more to talk of ships and speak with masters; as if the house could lie there in quietude, beam to the street with which it had no further dealings.

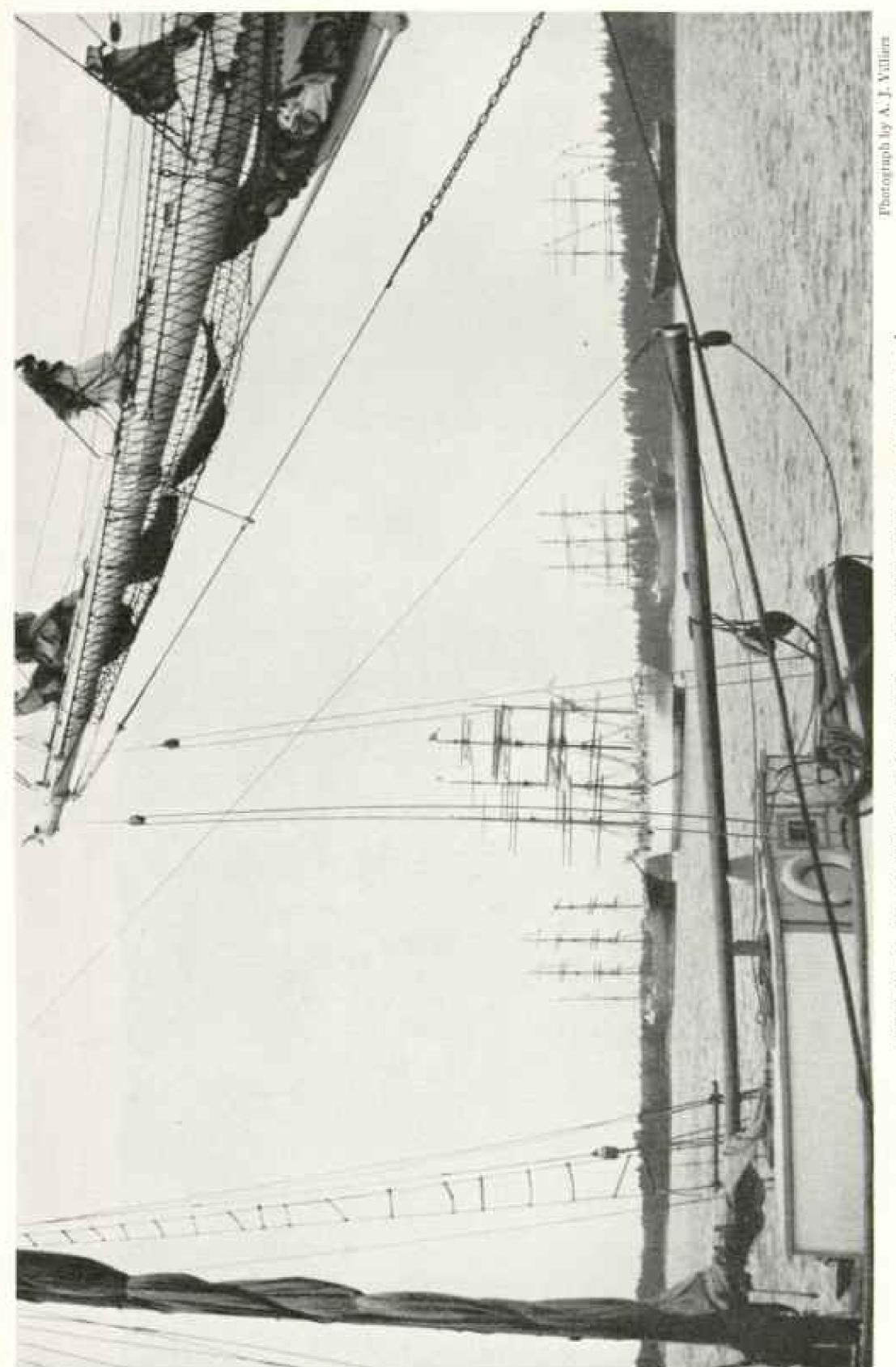
The Herr Troberg had built the church, they said, and had given it to Mariehamn. It stood upon the side of the tree-filled Esplanade, half jutting into the leafy lanes, as if it had come out there into the midst of the



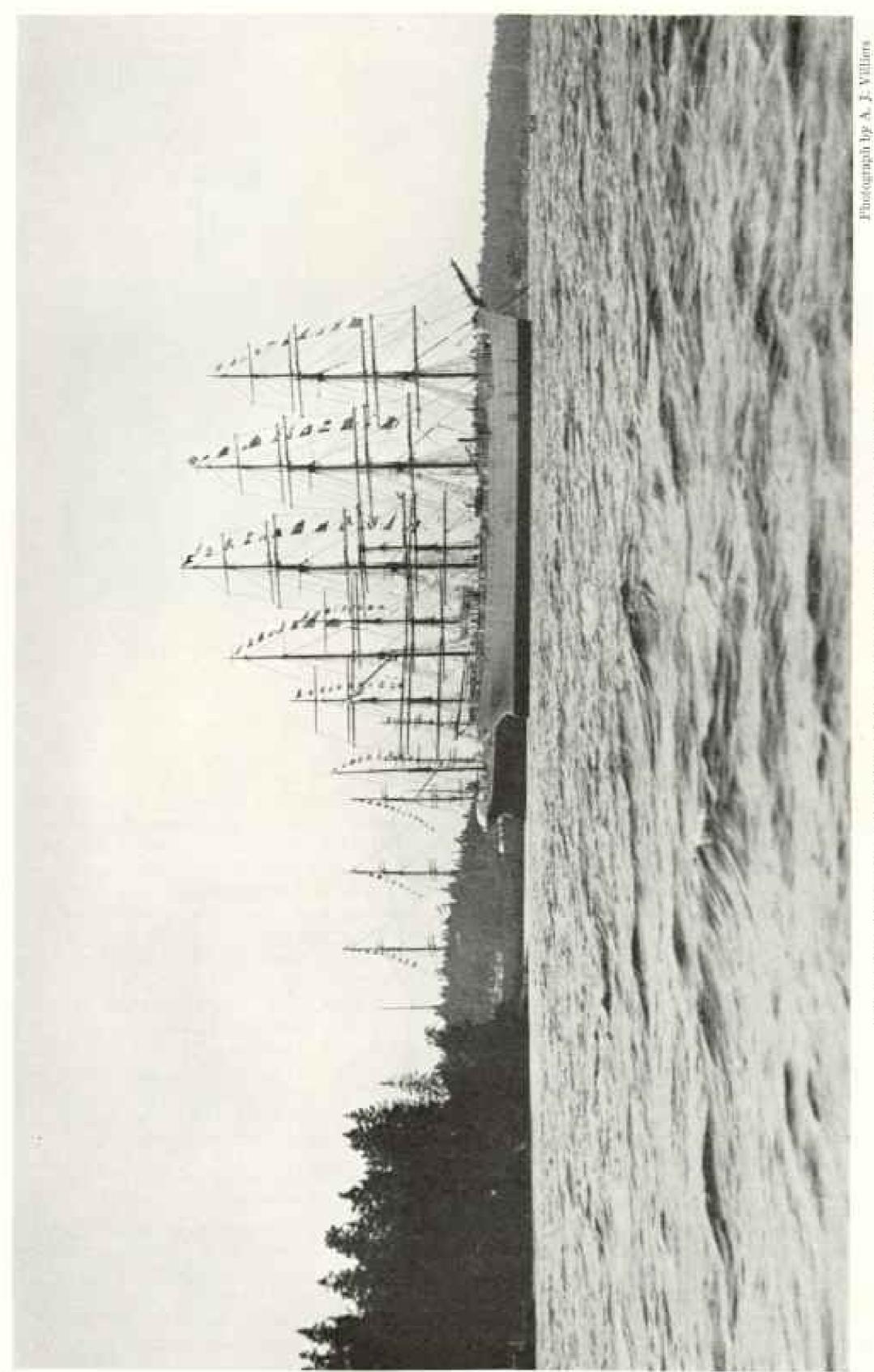
With the Vibing and L'Avenie, this historic vessel flying the Finnish flag has taken passengers on the Jong voyage to Australia. Summer cruises also are made about the Baltic. From all over the world people who "have always winted to make a trip in a sailing ship" write and ask passage on such vessels (see page 122).



Scotch fir as well as spruce and birch were near at hand for the first Aland boat builders. Not all the islands are wooded, however; many are treeless and rocky, without enough soil to plant even a row of potatoes. THE PORESTS PROM WHICH THEIR TIMBERS WERE CUT MAY ANCHOR HARD BY NEAR MARIEHAMN, SOME WINDJAMMERS



Looking from beneath the long and graceful bowsprit of L'Aventr, with the little schooner Setmo in the foreground, one sees a sight seldom met elsewhere on earth—four big sailing ships in commission! They are: Otherbank, Fiking, Pourners, and Penang. Sometimes 20 of these ships appear at once in this small harbon. BOWSPRITS AND YAMDS, CALLANT SHIPS, AND PINE TREES AT MARKEHANN!



FOUR-MASTERS, IN HOLIDAY DRESS, ANCHORED AT THEIR HOME PORT

These famous barks are the Viking, Pommern, and Othebark; the masts of the bark Penang are just visible above the pines of Mariehamn. All of these ships are well-known Cape Horn traders, representing among them more than a century of successful voyaging. For the past ten years they have flown the Finnish flag.



Photograph by Uno Markström

LONG-ARMED, CREAKING WINDMILLS FURNISH POWER TO BURAL GRISTMILLS

At one time the islands used more than 900 such mills to grind grain. Aland farmers sow grain and plant potatoes wherever open patches of soil occur on the rocky isles. Sometimes one farmer has crops on several adjacent islets, so must go from field to field by boat.

people that they might see it and pay their respects there to their God.

Other shipowners' homes I saw. Here Erikson, who owned the big sailing ships and had just acquired a tug; there Anderson, who had the Oaklands, with a man in London and other shareholders, and the Alca and Minerra and other vessels. On the other side was Lundqvist, who had the Plus, the Ponape, the Mozart, and some more.

It was all ships, this street, with shipowners living there and sailors walking up and down, and at the bottom the harbor, on both sides (for Mariehamn crosses a narrow peninsula), with the masts and yards of the barks growing there above the pines, as if they, like the pines, had begun there and grown there and always belonged there.

A shipowner hurried past me on a bicycle, carrying a basket with groceries. He was a hard man, they said; but they parted before him and respectfully gave him good day. He was a hard man, though he was small, and limped, and spoke querulously, with a plaintive, acquisitive, complaining voice; and he carried his groceries nervously. He owned many ships—hulks,

schooners, one tug—and he rode home with his groceries—on his bike.

At one end of the Esplanade was the town's hotel, Societetshuset, where the visitors lived when they came from Sweden. Sometimes I saw them in the street, broadhipped women in beach pajamas. The summer business was good, I was told; the Swedes were coming over in droves. It was good for the town; but the townspeople did not seem to like it much.

At the week-ends a special excursion steamer came from Stockholm, bringing hundreds more visitors to a little town already badly overcrowded; the tourists danced and ate and swam and bathed, and the Alanders, bent over their tasks in the fields, paid them no attention at all.

VIEING BLOOD STILL FLOWS IN ÅLAND VEINS

These Alanders might have been the original sailors, descendants of Vikings—there are Viking graves at Godby, on the main island, and elsewhere—who had stayed there on raiding trips to Finland because they liked the place, with its peace



Photograph by Gustav Heurlin

CHURCH-GOING ISLANDERS USED TO SHELTER THEIR HORSES IN THESE SHEDS; NOW THEY COME OVER EMOOTH ROADS IN MOTORCARS OR ON BICYCLES

and its woods, its good earth and its good fish that teemed in the waters. Viking blood still predominates here.

In a group of 6,000 islands even a small farm, away from the principal large island, would ordinarily include several islets. The plowman, if he would not swim, must boat to his fields; the farmer's wife going to market must go by sea. It was natural in these surroundings that a race of mariners should arise. Taking so much of their food from the sea, finding the material for shipbuilding so close at hand (the timber for masts and hulls, the flax for ropes and sails), they early built fine vessels for fishing and for the carriage of their produce to the markets of Stockholm and Abo (or Turku, as the Finns have it now).

In the early years the political restrictions imposed by the big ports, which jealously restricted trade to themselves, prevented the Alanders from going far afield; they were permitted only to carry their own produce to the markets, and on the way back they fished.

They still have a fleet of vessels doing that, as they did 500 years ago. They carry firewood on deck, and butter and eggs, and in the hold is a big well for the fish. Families live on board, and the small vessels may be found at any time during the northern summer by their Stockholm wharf. The fish are sold alive and the firewood is sold as buyers come, and the cutters take to the sea again with their hardy crews.

There were always timber and fish in Aland, and these, with the surplus products of the farms, were the first cargoes. After a while, when the iron grip of the restricting ports had partly broken down, the Alanders were allowed to send their vessels out into the Baltic. Now they built larger ships, schooners, and brigs. It was the custom for groups of farmers to combine and, with their own timber from their own fields and their own flax and their own labor, to build ships to carry their produce farther and farther afield.

ONCE ONLY SHORT-VOYAGE TRADERS

Each farmer holding an equal share supplied a man from his farm, together with his food for the summer's voyaging (a bundle of dried fish and dried bread); and in the winter's ice they remained at home, laid up. They carried their own goods so successfully that soon they began to carry



Nautical Photo Agency

THIS FIREWOOD BARK, THE "FRED," WAS LOST IN A STORM CHRISTMAS EVE, 1935

Some Aland families make their homes on such stout ships while they do a small freight business about the Baltic, often carrying wood, hides, and dried fish to Sweden. In years past, especially, they served as training ships for boys who later went on longer voyages.

other people's; and so the beginnings of their merchant service grew.

For a long time it was only in the Baltic and the Gulf of Bothnia. Politics still kept world trade the monopoly of a few nations, and no Aland ship was seen beyond the Danish Sound. They were regarded as short-voyage traders, as unimportant carriers of farm goods on small trips, and no one upon earth imagined that these islands would ever become the last home of sail.

In 1854 the British sacked Bomarsund; for Aland, like Finland, was Russian then, and the British were at war with Russia. Bomarsund was a fort for the protection of the Gulf of Bothnia; but the Tsar's soldiers were corrupt, and even to-day you can hear stories of the sand they had instead of powder and the cannon balls made out of wood.

Bomarsund fell in ruins, an easy prey. The local inhabitants had as little use for the Russians as the British had, and no one minded seeing the forts go up in smoke. But the Alanders' own merchant ships were there, too, and the British sacked Bomarsund and burned them.

That was a sad blow. Even upon British atlases to-day you will often find Bomarsund marked in the Aland group, and nothing else. But it is a weed-grown ruin; it looks as if no one had turned a sod there from 1854 until to-day, nor sought to win back man's buildings from Nature's earth (see page 125).

The Alanders, many of their vessels burned and their port destroyed, soon began again. They founded the town of Marie-

hamn where there had been two fields, stretched across a narrow peninsula, with harbors at both ends. It was an ideal place and it soon grew. It was called Marie-hamn after the Tsaritsa Marie, and its name has not been changed, though everything Russian has long been driven from it.

With their new port, the Alanders began to build their fleet again. They were good shipwrights, good carpenters, good designers. They built better vessels and found more trade. In those years that followed, then, between the sack of Bomarsund and the turn of the century, gradually the hated steamship was rising, and proud sail, fighting hard — scornfully at first, but soon in desperation — was surely going to the wall.

Suez was opened in 1869, and the clippers passed. Steam grew and grew. The wooden ships of the American merchant service suffered; gradually at first, but soon hurriedly, and then in panic, they were discarded.

A SHIP MUST RETURN HER COST IN THREE YEARS

In the great discard of sail the Alanders, unworried by steam (and unworried by motor. ships and turbo-electric drive even now), hought up such vessels as appeared to be good bargains. They acquired Nova Scotian barks, Bluenose barkentines, Down East full-riggers. The vessels were old and pretty nearly worn out when the Alanders got them; but the men were perfect sailors and great shipowners and could nurse a ship back from the scrap heap and grind a profit from her for years.

They bought ships cheaply and they bought good ships. One of their shipowning principles was that a ship should return her cost in three years. Buying cheaply, they could do this; if freights did not pay, they laid their ships up. The capital investment was so small, and usually there were so many shareholders, that it did not matter. They could wait for better times, and there was no flag upon earth with which they could not compete.

So the turn of the century found them gradually adding metal-built ships to their large fleet, though there were many oldtimers who looked upon ships of iron and



EA. J. Villien

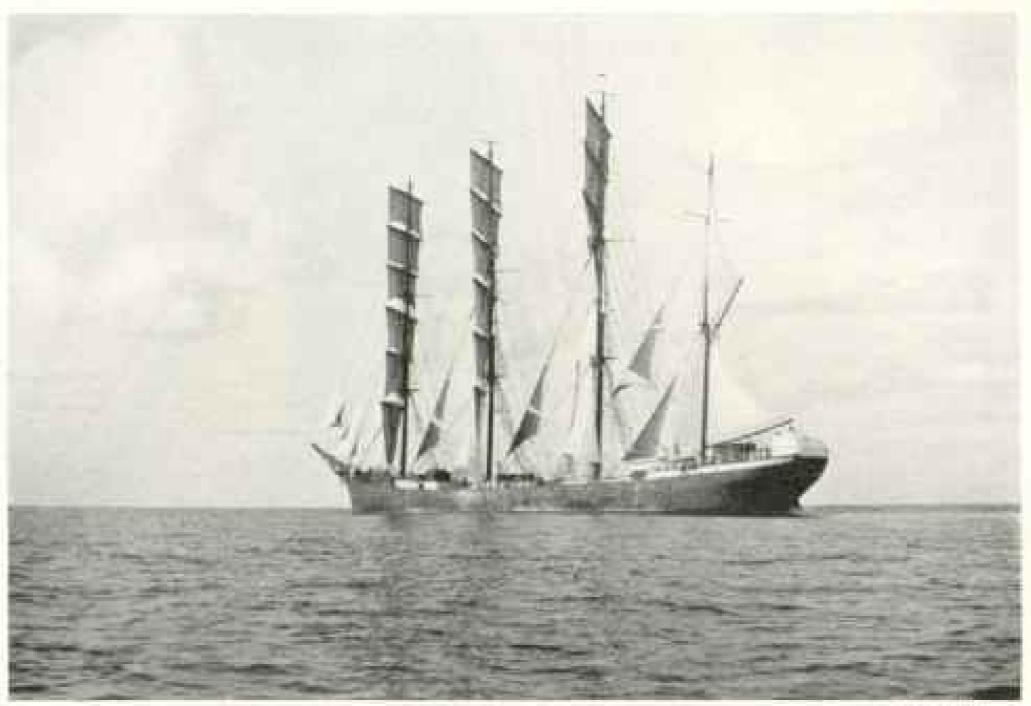
APPRENTICES ALOFT, ALONG THE FOREYARD

At Mariehamn's nautical academy tuition is free to Aland boys. After a winter of study, the cadets go to sea for training, then back to school. Alternating thus between classroom and forecastle, a quick, ambitious boy may gain his master's papers in about seven years (see text, page 123).

> steel with apprehension, holding that it was not right to build ships of metal when there was good wood. Wood would float, they said. Iron sank. Give them wood!

> Now the British were steadily scrapping their big sailing vessels; the wooden ships from America were worn out and could no longer be used for the deep sea. They descended to carrying timber in the Baltic and North Sea, and they were kept at that, with windmill pumps sending the clear water through their old sides, until they fell to pieces.

> Iron ships were acquired to send tramping on ocean voyages. Mariehamn was



BA. J. Villien

THE "PARMA" RUNS BEFORE THE TRADE WINDS ACROSS TROPIC SEAS

Discarded now by all the principal maritime nations, such few sailing vessels as remain in international trade are practically all owned by the Aland Islanders.



Photograph by Gustav Heurlin

HALTIC HERRING AND COD ARE THE COMMON FISH OF ALAND COMMERCE

Both dried and fresh fish are sold to Sweden. Alanders also hunt edible migratory birds and gather the eggs of native sea birds. Eider duck down, collected from nests, is exported.



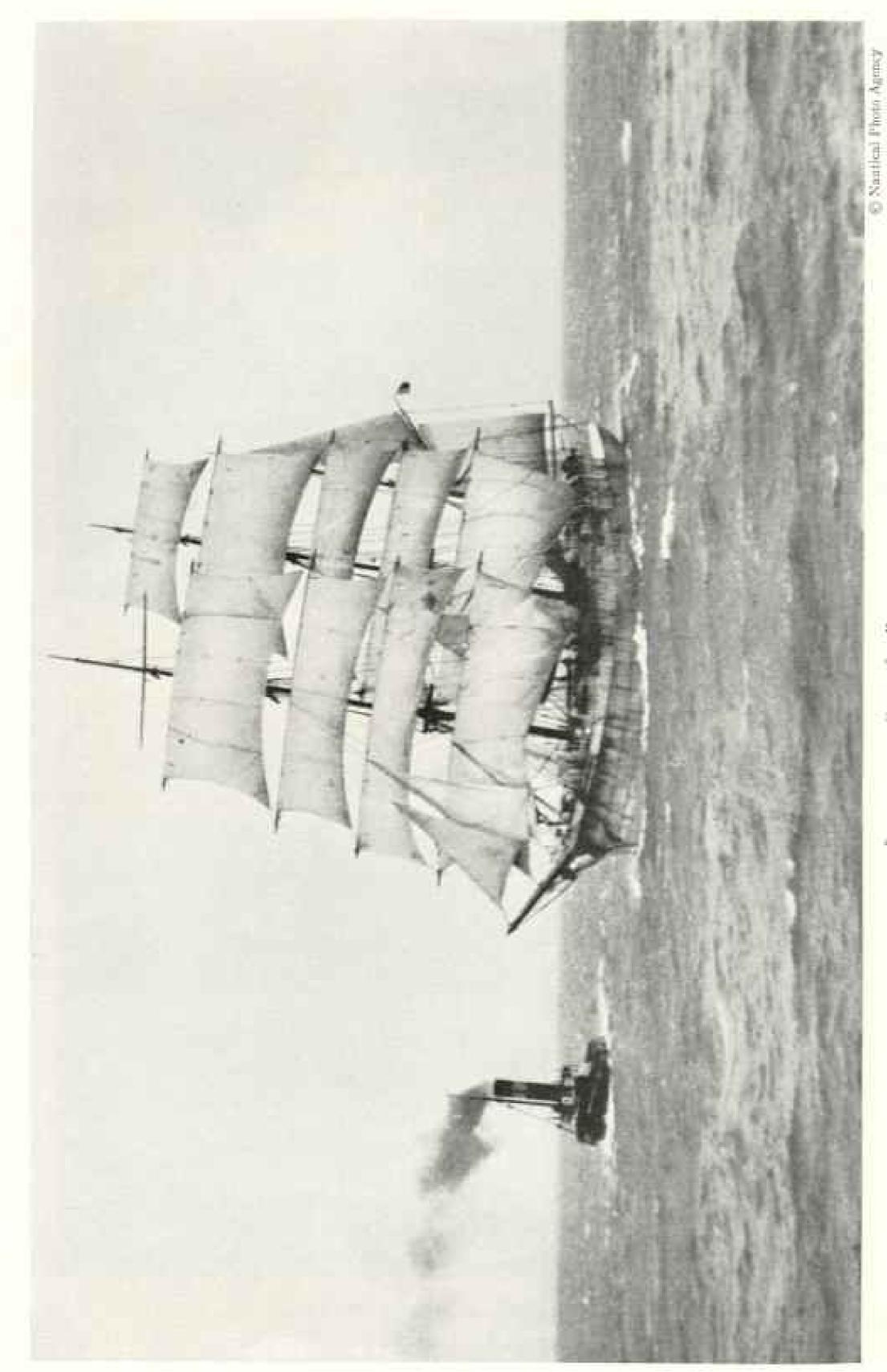
KASTELHOLM, NOW IN RUINS, ONCE WAS A STRONGHOLD OF FEUDAL CHIEFS
Though Finland was long a part of the Swedish Kingdom, the Finns for centuries regarded the Alands as peculiarly their own, despite many disputes as to sovereignty (see page 122).



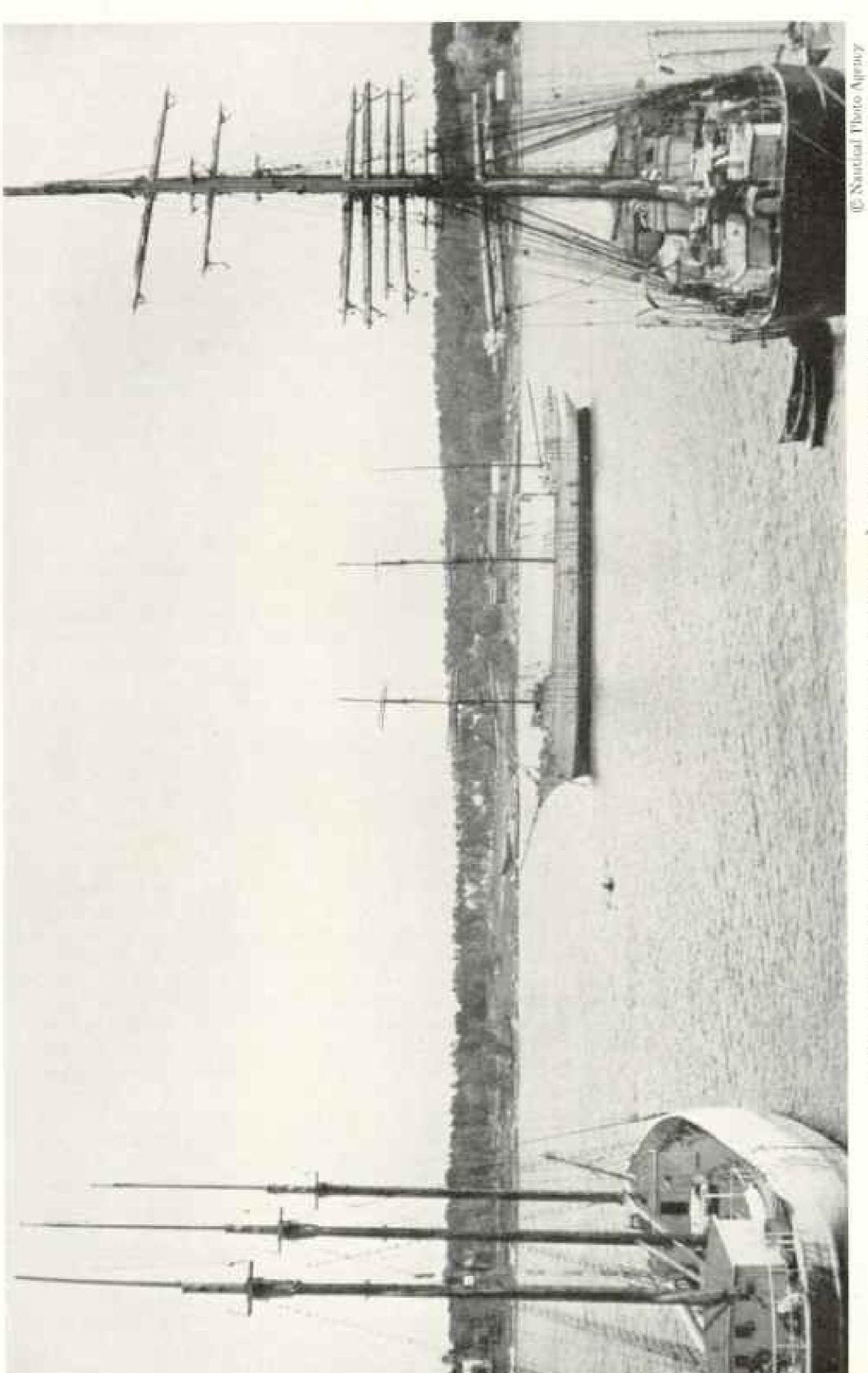
Photograph by A. J. Villiers

EVEN OLD SHIPS MAY COME HOME TO DIE

Built before 1840, the barkentine Termen sailed the seas for more than 80 years; yet that is not an unusually long life for an Aland ship.



ÅLAND BARK "LINGÅRD" GETS AN ESCORT OFF THE MOUTH OF THE THAMES LOADED WITH FEREWOOD FOR LONDON, THE



MARIEHAMN HARBOR IS THE LAST HOME OF THE WORLD'S LAST WINDJAMMERS

Bad as ocean shipping trade has been since the World War, by small crews and strict economy Aland sailing ships have somehow survived in competition with steam. Though rare and exceptional cases, the Harzogia Cecille, for example, paid for herself in two years, and the Lawinil carned \$200,000 on one voyage from Buenos Aires!

growing now, and that strange name began to be seen upon the counters of ships in the Plata, at Valparaiso and in Table Bay, in Melbourne and Mobile. Wherever sailing ships went, the Aland ships were seen. Quietly and unobtrusively, they entered the commerce of the world; but still no one paid any attention to them, and there was no idea whatever that here alone sail would last when it had died in all other waters.

At the outbreak of the World War 30 big ships had been brought to Aland and were run successfully. At the same time wooden ships were still being built for the short trades, and bought from Norway and Estonia, Sweden and Denmark, as they were discarded there. Through the war the Aland ships suffered heavily. Again they were flying the Russian flag, though there was as little Russian about them as there is now Finn; and as Russians they were belligerent and were sunk.

Sailing ships were largely kept, during those dangerous years, in the Pacific Ocean and on the Atlantic scaboard of the two Americas, where there was less chance of doom from mine and submarine. Insurance rates on sail were very high and the risks of making an Atlantic crossing were considerable; but here the best freights were paid and here the hardy Alanders ran their ships.

STORM AND WAR DEAL HEAVY BLOWS

They lost eight of them in one month, in May, 1917. Insurance rates rose as high as 42 per cent. Then came the Russian Revolution, and the Russian maritime insurance companies were blown to pieces. What insurance the Alanders had paid was lost; everything was gone when the war ended—ships sunk, crews lost, insurance nonexistent. A lesser race would have gone down under such blows and not have risen again. Aland ships were held in New York, in Buenos Aires, in whatever great ports they chanced to be; for they had no flag to fly in those sad days and no one to give them clearance.

But the war ended. Russia became a closed book, as far as the outside world was concerned, not to be opened again for some years. Finland got its flag; Aland was attached to Finland. The Alanders began to build up their merchant service again, still with masts and spars, which were then under general discard from all nations—even from Finland and Norway.

Some of the older Aland shipowners had had enough and did not buy more ships after the war. But new ones arose; one was Gustaf Erikson, who had been a shipmaster himself at the beginning of the war and lost his first vessel right at the outset of that catastrophe (see page 102). In 1920 he began building up what now has become the last great fleet of sail in the world; the British were discarding, finally; the German ships that had been imprisoned in South American ports throughout the war came up to Europe and, handed over to Allied powers that did not know what to do with them, found their way to Finnish hands.

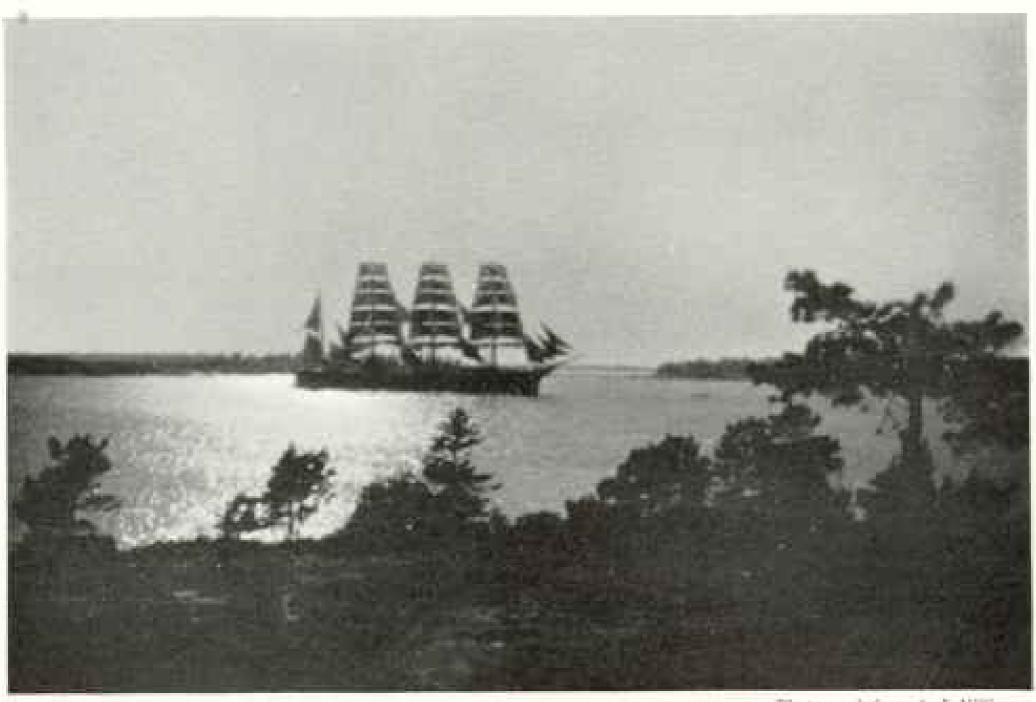
Erikson bought up the beautiful German training ship Herzogin Cecilie, paying some \$20,000 for her as she lay in a French port (see illustration, page 106). He sent her to Australia for grain and to Chile for nitrates, and in two years she had returned her purchase price and more besides. She has paid for herself four times over since. He bought the big Lawhill, and with one lucky freight from Buenos Aires cleared \$200,000—a historic occasion, one would think, for that surely was the last time such a profit was made under sail.

He bought up other ships—from the British, from Norway, from the mainland Finns. He refused to be depressed by the woefulness of the shipping market, by the bad outlook for freights. The freight position, bad then, has not become better since; but the Erikson Line has thrived and grown. As I write, it numbers eleven fourmasted barks, seven barks, a full-rigged ship, three barkentines, five schooners.

The ships have been run upon the lines of strictest economy; not an unnecessary penny goes on them, but they are kept in a properly seaworthy condition. They do not wander around the seas, poor cut-down wrecks, forlorn survivals of better days; they sail in their full sail plans, as proudly as they ever did, though they may carry the smallest crews they ever had.

It took courage to build up that line. It took courage to buy up ships when everyone else was hurriedly discarding them. It took courage to believe, and to hold to the belief, that while the wind blew there was still work for sails. Gustaf Erikson had that belief; still has it.

Now he has a corner on all the commissioned sailing ships of the world, and those Cape Horners which do not fly his house flag may be counted upon the fingers of



Photograph from A. J. Villiers

WEAVING HER WAY THROUGH NARROW CHANNELS, A HUGE FOUR-MASTER SAILS FOR AUSTRALIA

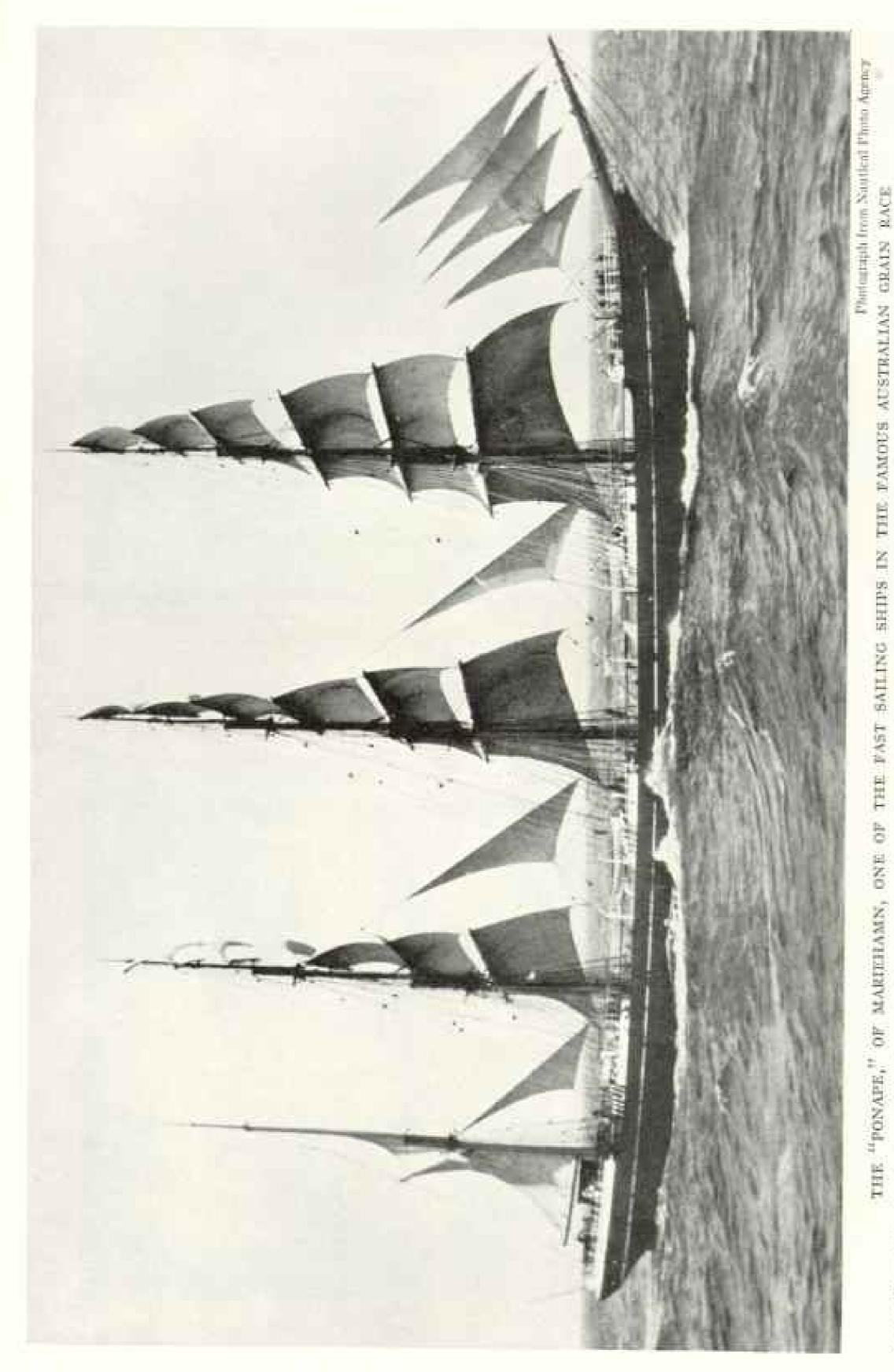
Lying in Bultic waters between Finland and Sweden, 6,554 islands comprise the Aland group. Many, of course, are more islets, sometimes cultivated but uninhabited. Formerly many bears, wolves, and deer were found on the larger, forest-covered islands.



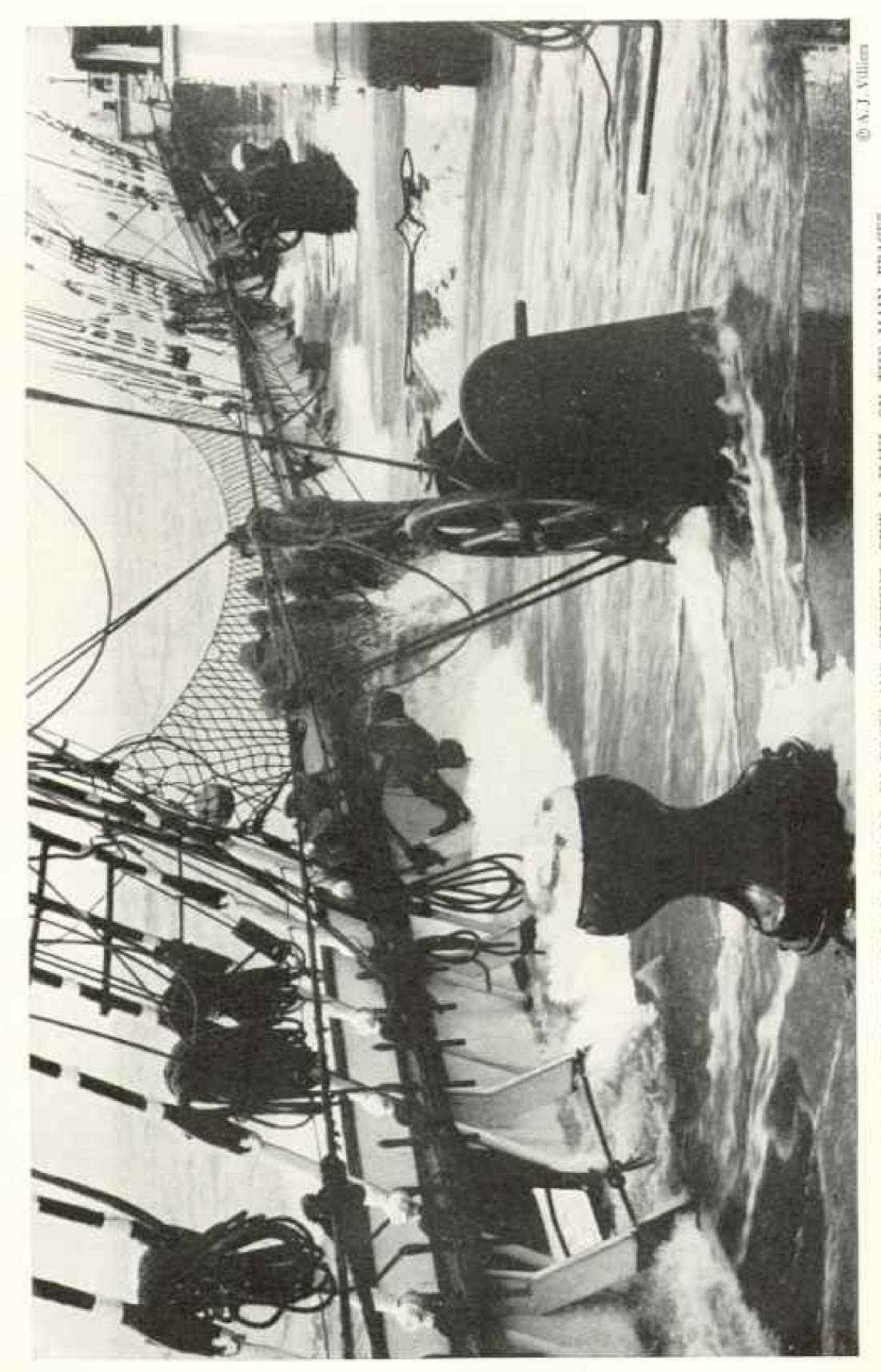
© A. J. Villiers

A HEELING WINDJAMMER IN HEAVY WEATHER

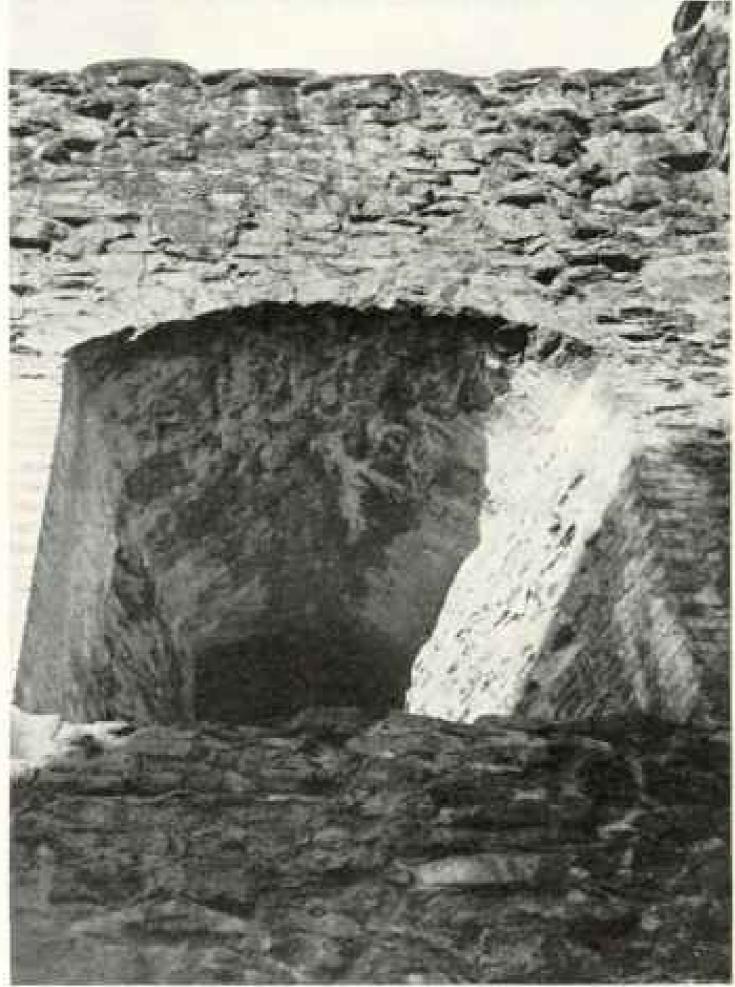
On the long, stormy voyage around the Horn to Australia, many an Aland lad has been washed overboard by such seas as this. Compare this deck scene with that of the sheltered, glassed-in "palm gardens" and promenades of the modern liners!



Case off for Fiji, nitrates from Chile, firewood for ports nearer home, unything that can pay freight is cargo to Aland skippers; but Australian wheat really keeps this sailing fleet affoat.



WET WORK IN THE WAIST, AS SAILORS, IN BOOTS AND OILSKINS, CIVE A HAUL ON THE MAIN BRACHS



Photograph by A. J. Villiera

INSIDE THE RUINED WALLS OF ANCIENT KASTELHOLM

In this dungeonlike room, which was closed in then and without light, King Eric XIV of Sweden was once held prisoner. Surviving from the days of fiels and fendal princes, this Aland castle was built soon after 1300 A. D. (see page 115).

one hand: Parma, Mazart, Priwall, Abraham Rydberg, C. B. Pederson. He is still buying ships. He bought the Pamir from the Germans in 1931; the Passat in 1932; L'Avenir from the Belgians the same year.

CREWS OF BOYS AND YOUNG MASTERS

His ships carry crews of boys; even the officers are very young, and many of the masters are younger than 30 years. Some of the ships are school ships, carrying premium-paying apprentices as crew. So many people wrote from all over the world asking to sail in his vessels that he equipped two of them especially to take passengers—the former training ships Viking and Hernogin

Cecilie; and, not content with that, bought L'Avenir from the Belgians (page 104). He fitted her to take 80 passengers, of three classes, and in the summer now she makes Baltic cruises with the Erikson tug fussing along behind in case of need. The tug burns firewood for economy's sake, and the sailer carries a load of firewood on deck for her, along with the passengers. The Viking, Herzogin Cecilie, and L'Avenir are widely advertised to carry passengers to Australia.

The Erikson Line is never short of sailors. It has never been impeded by labor troubles, even when all the rest of the world's ships were beset by strikes and lockouts and angry squabbles.

Wages were cut ruthlessly in 1919—they never had been as high as those of other nations—nor did they rise again. Crews were recruited from country boys who may never have seen a ship before, but were born sailors.

Big barks were sent to sea with handfuls of boys, driven by officers aged 20 and 21 years. With any other race it might not have worked; but with the Viking Alanders it was successful. Not an Aland deep-water ship was lost from the end of the war until 1932, though some were sold for hulks, and some, partially dismasted, were condemned when they reached port and did not go to sea again.

Always the ships were manned with Alanders, no matter how far new crews had to be sent. A crew was sent to New York to join the bark Woodburn and, arriving in New York, the men decided that the prospects of life in America were much better than life aboard the Woodburn and deWoodburn took case oil from Staten Island to Sydney and was sold for a hulk in the Fiji Islands.

I saw her some months ago, swinging at her anchor there, blackened and cut down, and wondered about her deserting crew.

TO THE DEEP SEA BORN

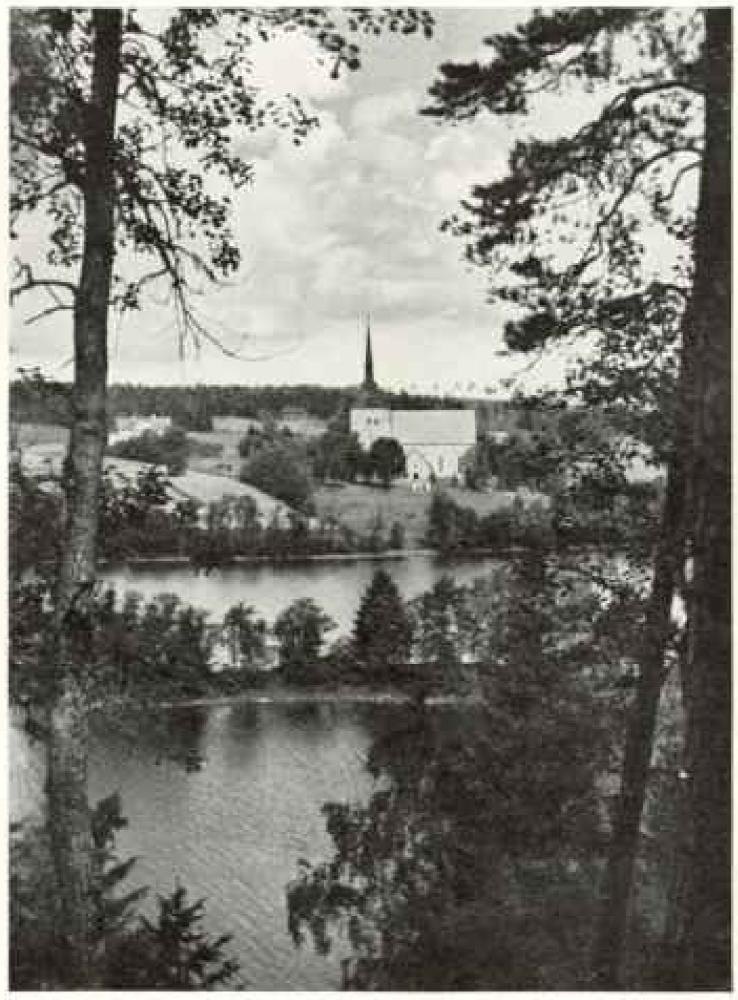
Ordinarily a small Aland boy can pull a boat almost as soon as he can walk, and sail one not long afterwards. At the age of ten or so he makes a Baltic voyage, helping in a "sump" taking firewood and fish to Stockholm or to Turku. From these he graduates to the Baltic schooners, and so to the North Sea barks; thereafter it is an easy step to deep water, Cape Horn, and the grain trade from Australia.

A Finnish law restricts berths before the mast (as opposed to premium apprenticeships) to Finnish nationals, and the forecastles of the ships are ordinarily filled with

Alanders. But the half-decks, where the apprentices live, contain all the nationalities of the world. He who wishes to become a sail-trained sailor now must sail in Aland ships—and pay \$250 to the owner for that "privilege."

Americans are there, Englishmen, Australians, Germans, Poles, Swedes, Danes, Belgians, Chinese. In some of the ships half the crews are apprentices; for there are still many nations which insist that no boy may enter a nautical academy unless he has served at least one year in square-rigged, deep-sea sail.

To the Alanders deserved promotion is



Photograph by Une Marksteine

THIS CHURCH AT SUND, FRAMED BY TREES, SUGGESTS THE ENGLISH COUNTRYSIDE

Nearly all of the 27,000 people who live on the islands speak Swedish. Their manners, customs, dances, and religious observances are similar to those of Sweden.

comparatively easy. A nautical academy is provided free through the winters in Mariehamn; here, after two years of service, candidates may sit for their second mate's papers, first spending six months at school. Tuition and books cost nothing; the boy must provide only his board, and in Aland that costs little.

After two years serving as second mate, the candidate returns for another winter's schooling to prepare for his first mate's examination; that successfully passed, he goes to sea again. This time he must remain there until he has served as chief mate of a big ship for at least a year, and then he



DA. J. Villiers

ALOFT IN THE TRADE WINDS

Boys come to Aland from many foreign lands to Jearn how to handle sailing ships. English, Polish, Danish, Swedish, American—even Chinese lads—are found as apprentices on these ships. Some pay as much as \$250 for the "privilege" of a long cruise (see test, page 123).

may try to qualify as master. An Alander will frequently have spent seven years at sea and three years in the nautical academy before he gains his sea captain's certificate. It may be taken for granted, then, that he knows his job. The island will tolerate no slipshod mariners.

There is a free school for cooks and stewards, too, where these also must qualify.

A CAREFUL, HARD-BITTEN RACE

They are quiet, these Alanders. It takes a long time to know them. They are not given to the utterance of long dissertations upon the burning problems of the day. They are a quiet and careful race, hardTo them waste is shameful and a loud mouth an abomination. They have little time for progress that means only change.

The crews of the ships are steady boys, blue-eyed and competent. When their Australian voyage is over and the grain discharged into some English mill, they bring the ships home to Mariehamn, to lie there while the new grain ripens in Australian fields, 13,000 miles away, and there they repair their vessels and make ready for another voyage.

SHIPS THAT NEVER CAME BACK

Sometimes a ship does not come back—the Hougomont, dismasted and condemned in 1932; the Melbourne, sunk by an oil tanker off the coast of Ireland the same year, went to the bottom there with all her officers and half her crew. Many of the boys do not come back, though ordinarily the ships do; the mortality is high in

Cape Horn sail. It has always been so.

The little newspaper published twice weekly has many obituary notices of small boys lost at sea, whose shroud is the ocean and whose grave the great rollers of the South Pacific storms (see illustrations, pages 113, 119, 121).

The newspaper devotes the greater part of its back page to a list, nearly two feet deep, of ships—most of them sail. Here you may read, thinking yourself back in the last century at some port of the heyday of sail on the coast of Maine, that the bark Olivebank has arrived in the Seychelles Islands, the Grace Harwar is at Lüderitz, the Winterhude in Peru.



Photograph by Uno Markström:

RUSSIANS BUILT THIS FORT AT BOMARSUND WHEN THEY HELD THE ALANDS

In a war with Sweden, Russians came out over the ice and took the Alands in 1809. By the Treaty of Frederikshamn the Alands and Finland were ceded to the Tsar. When the British fought Russia in 1854, Admiral Napier smashed the Bomarsund forts (see text, page 112). After the Russian Revolution of 1917, Finland became independent,



Photograph by Gustav Heurlin

SUMMER VISITORS FLOCK ACROSS THIS BRIDGE TO THE ALAND BATHHOUSES

Wild ducks nest in the weeds and reeds about inlets; many geese and swans are also seen. Native wild fowl, now protected, were diminished by the plundering of nests in years past.



DRIFTWOOD PICKERS, THEIR FACES TANNED BY WORK IN WIND, RAIN, AND SUN
Every Alander has his allotted task-boat-making, fishing, sailing, dairying, wood-chopping, or
farming. Only a few retired shipowners rest now, after years of toil.



PULLING TO A "GAM" ON THE "PAMIR"

12 A. J. Villiers

In the old whaling days it was common for ships' crews to row considerable distances in midocean on visits, or "gams," to other vessels. However, to row 15 miles for an exchange of pleasantries, as the crew of the Parma is doing, was not often attempted, even in the leisured days of the last century (see text, page 101). The boys and Mrs. Villiers are seen in the Parma's starboard lifeboat in the calm waters of the doldrums.



Photograph by Gustav Henriin

NEATNESS IS THE BULE IN A 125-YEAR-OLD ALAND FARMHOUSE

At the left, behind the curtains, are beds, like a ship's berths, built into the wall, one above the other. On the floors are home-made rag carpets. To save wear on her shoes, one of the women is barefoot. In the corner stands the family "grandfather's" clock.

Down the long lists of ships you may follow the romantic entries that read as if they belonged to another age. No radio reports come in here daily for an expectant public awaiting news; some of the items are months old, but the ships will come in. Most of them have.

SIGHT-SEEING IN MARIEHAMN

Out along the Esplanade the pine tops wave in the wind; the rain has ceased now, and the beach-pajamaed ladies are about. I take a sight-seeing trip, not wanting to so much, with all these tidings of ships to be found; but may as well see what I can.

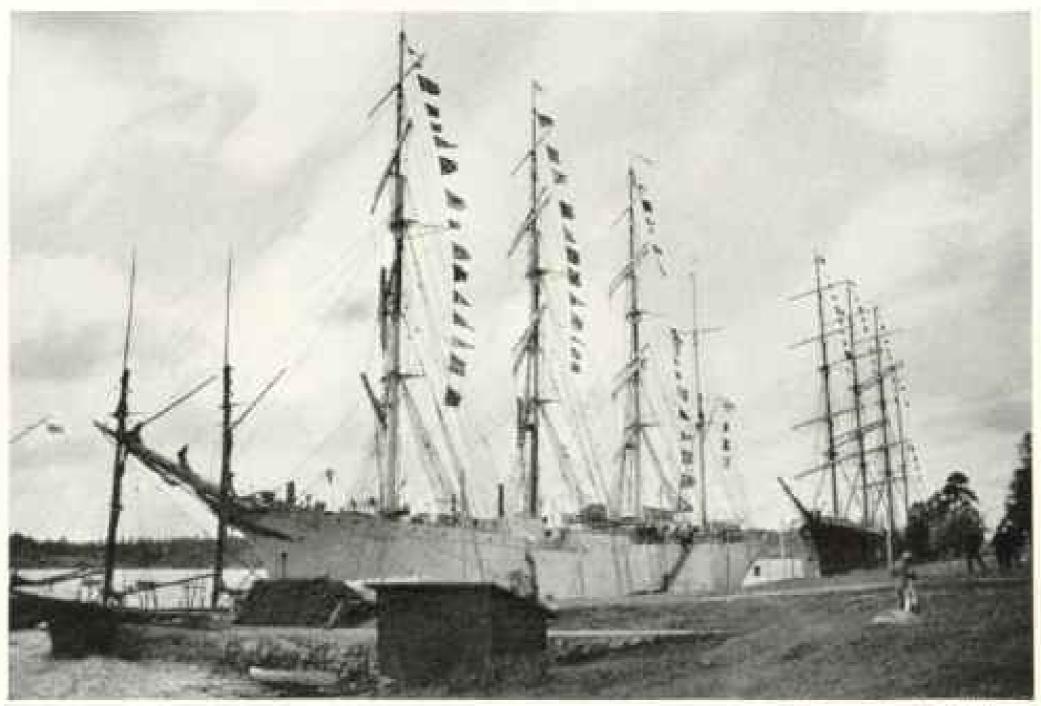
I am driven to Kastelholm, with its ruined castle standing bleak and high, and a guide shows me a dismal room where a king of Sweden was imprisoned hundreds of years ago (see illustrations, pages 115 and 122). I drive on, past the lovely countryside, past the windmills and the quiet churches, past the old women working in the fields, and come to Bomarsund with its ruins (see page 125).

I go over in a ferry from there to Vardo, to a feast held near by. But the pajamaed ladies are there this year. There are some girls in national dress who dance; the maypole still stands in the center of the field. There is an open stage at one end, in a kind of natural amphitheater; here some youths and maidens, ill at ease and self-conscious with the visitors looking on, give charades. They sing Aland national songs and Swedish ones—nothing Finnish.

Vårdö, past the wreck of a barkentine whose bones have been laid here to rest, with her bird figurehead still looking stead-fastly out from the worn, bleached bows. I ride in a little steamer past forest and field, past land that has been tilled a thousand years and bred mariners for ten generations.

SWEET SCENT OF RAIN-WASHED FIELDS

The pines smell sweet and the fields are lovely, as if they had each been worked over carefully and swept up and cleaned, and then left there for a while to absorb the



Photograph by A. J. Villien

VETERANS OF THE AUSTRALIAN GRAIN TRADE RESTING AT MARIEHAMN BETWEEN VOYAGES

After the long run home from Australia, these last surviving sailing ships in that far trade unload their wheat cargoes at British ports, and then tie up at Mariehamn until their next sailing day for Australia, 15,000 miles away. While they lie in the northern port they are of constant interest to visitors, and many a small boy comes on board to ask for employment.

further cleanliness of the rain. From the white farmhouses the smoke of fires arises, and the women toiling in the fields have gone home.

WOODEN SHIPS BUILT NO MORE

And so back again to Mariehann, with the tree-filled Esplanade, and the sailors walking up and down from their ships, and the talk of the grain trade and trade winds and Cape Horn. Here alone of all places upon earth now, at any hour of day or night, upon any day of the year, you may find the crew of a full-rigged ship, from master and mates to carpenter and cabin boy. True, a steamer or two belongs to the islands now, but they are scorned; there are no engineers and the steamers do not pay.

The little wooden ships are built no more and the winter's lay-up yearly lengthens; to the big ships there remains only the grain trade with Australia. If that goes, they are ruined, and masts and yards will be seen above the pines no more—neither there nor elsewhere upon earth, nor again in history.

Yet it is fitting that the Viking people of those northern rocks should nurture proud sail until the end.



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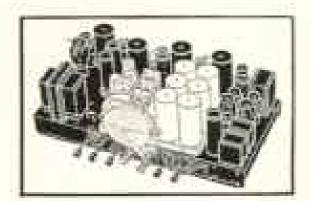
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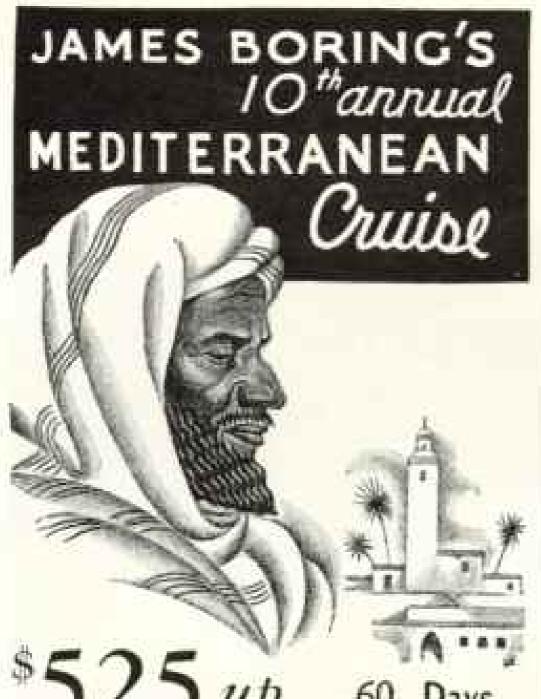
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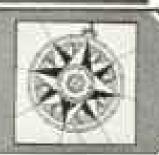
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How you live is often far more important to your health than where you live. A striking example of what proper sanitation can do is shown in the Panama Canal Zone. Down there, homes have been made healthful as a result of the work done by the Sanitation Department of the United States Army. Constant vigilance keeps them so. Your home, wherever it is, requires equal vigilance.

Take an inspection trip through your house, from attic to cellar, and see whether the heating, lighting, plumbing and ventilating systems are in condition to give you and your family a full measure of health and safety. Should any of them be repaired, altered, or replaced?

If you find that your house is in apple pie order, you will be gratified. If you find a condition which should be corrected, you will be glad to do what is necessary to make your home safer, more healthful and more comfortable,

INSPECT THOROUGHLY

Hearing

Do your heating arrangements keep your home at an even temperature—about 70°? Have the flues and chimneys been cleaned recently? Is coal gas emitted from furnace or stoves?

Plumbing and Drains

It is essential to health that sewage should be properly disposed of, and that plumbing and drains be kept in repair. Is hot and cold water available for kitchen, bathroom and laundry?

Electric Wiring and Gas Outlets

Defective electric wiring or connections may cause fires. Gas leaks may cause suffocations or explosions. In case of doubt get professional advice. Repairs must be made by a qualified expert.

Ventilation and Screens

Adequate ventilation is important to health, but drafts cause discomfort and also waste fuel. Inspect the casings of doors and windows to see that they open easily and close tightly.

Screens at the proper season are necessary to keep out flies and mosquitoes—disease carriers.

Food Protection

Does your refrigerator hold its temperature between 40° and 50° and keep perishable food in proper condition—especially the milk?

Leaks, Cracks or Breaks

Is there dampness in cellar or attic caused by a leak? Do clogged drain-pipes or gutters at the edge of your roof furnish breeding places for mosquitoes? Is there broken plaster in walls or ceilings in which vermin may breed? Shaky stairs? Weak banisters? Loose boards in floorings? They add to the number of falls—the most frequent of all accidents in homes.

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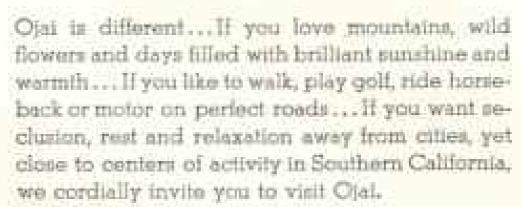
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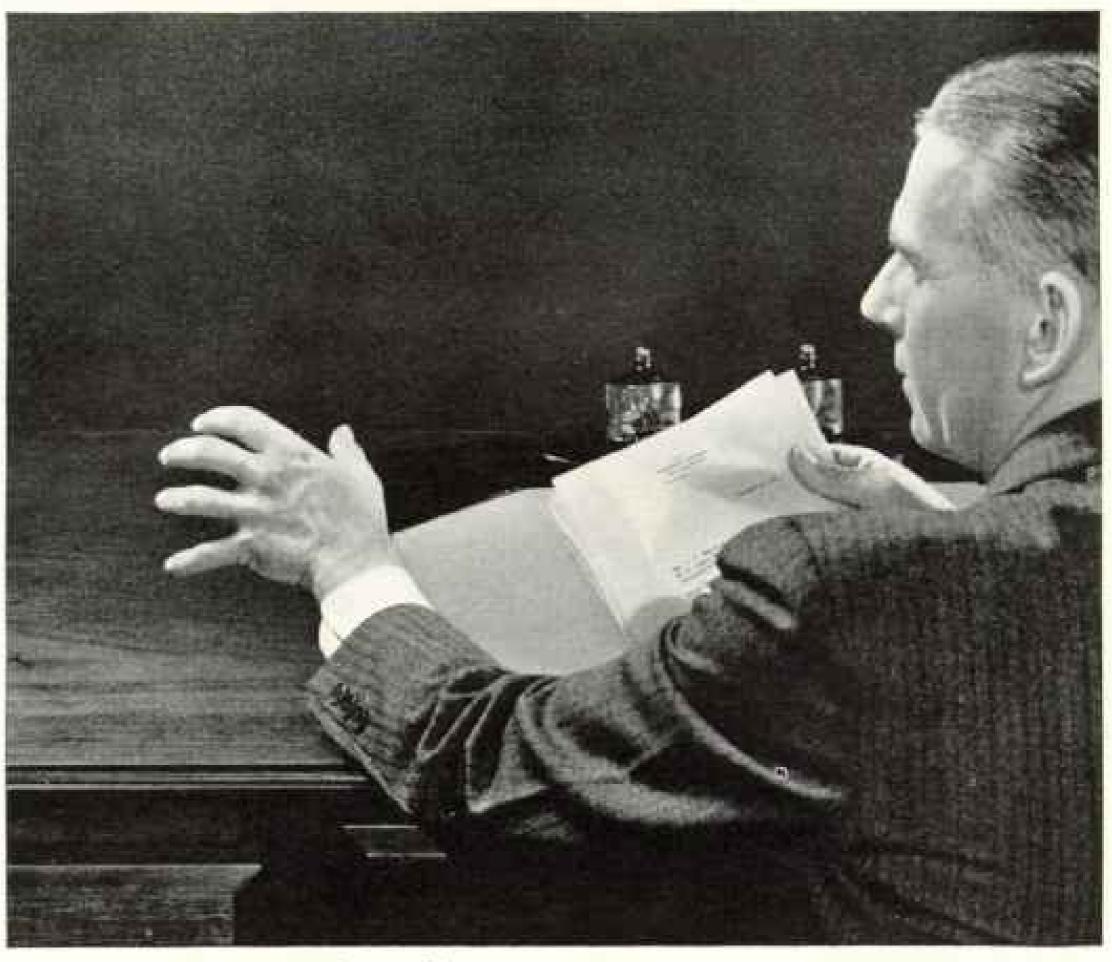
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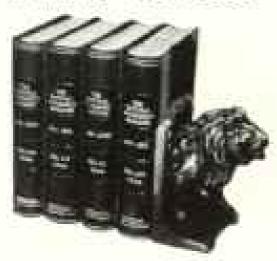
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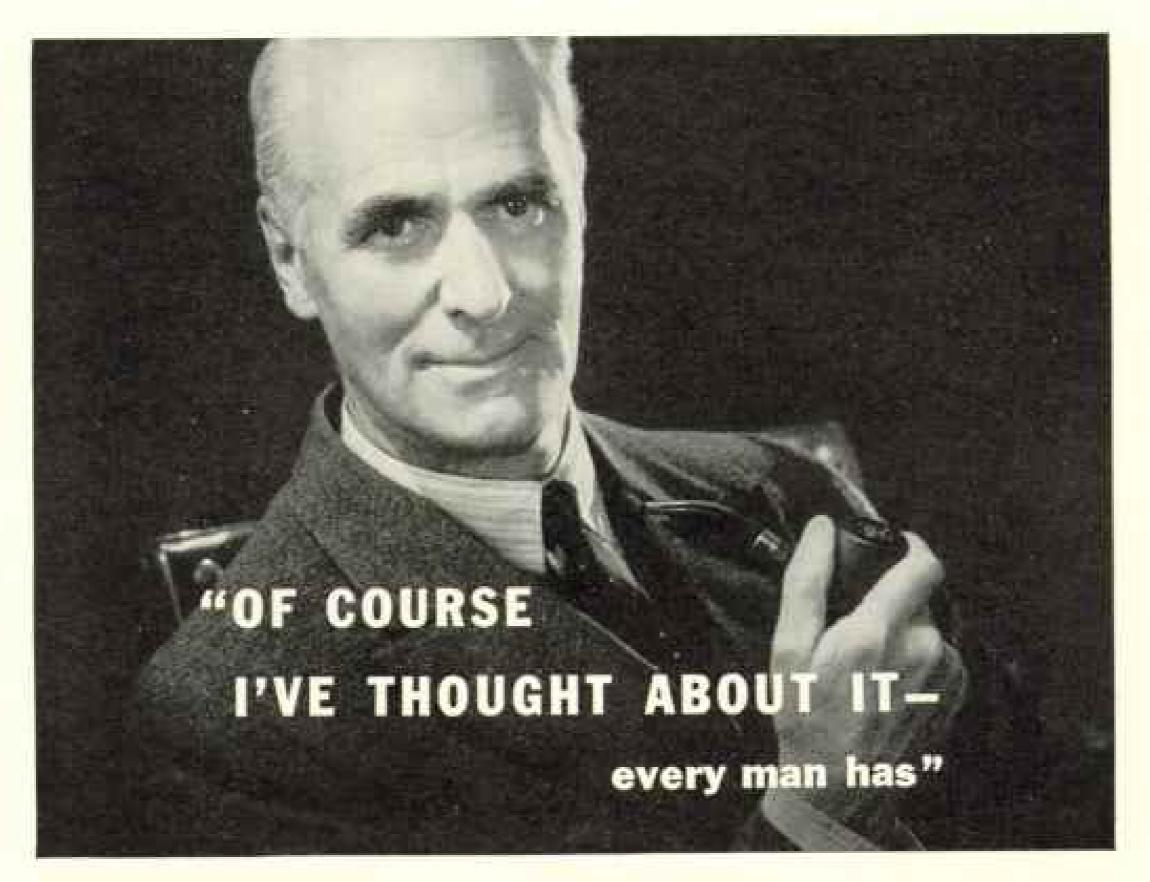
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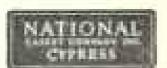
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