

DEAR READER:

As its contribution to the nation's Bicentennial Celebration, the New Jersey Agricultural Society has reprinted three of the volumes in its series of 25 publications on the history and personages of early rural New Jersey.

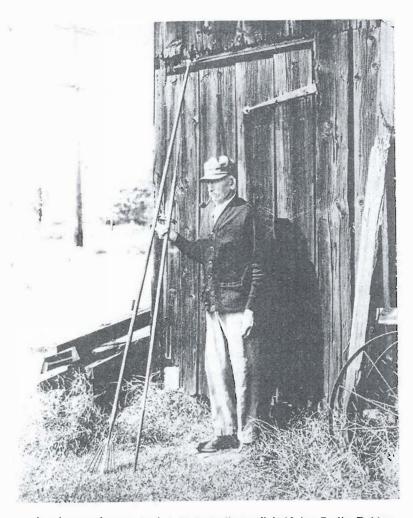
The series was begun in 1947 with a history of the Society, the oldest farm organization in the United States. The most recent of the books, "Whaling in New Jersey," by Dr. Harry B. Weiss with Howard R. Kemble and Millicent T. Carré, was published in 1974.

Many of these books are now collectors' items and the majority of them are out of print.

We have chosen to reprint three of the most popular volumes: "Pages from the Past of Rural New Jersey" by Robert J. Sim, "The History of Applejack" by Dr. Harry B. Weiss, and "Rafting on the Delaware River" by Dr. and Mrs. Weiss.

By making the reprints available, it is the Society's hope that a wider audience can enjoy these memorabilia of early times in the Garden State.

> PHILLIP ALAMPI Secretary-Treasurer New Jersey Agricultural Society



A winter cel spear and a snapper "proge" held by Rudie Reidenbaker of Fork Landing on the Pensauken: a fisherman, gunner and guide known with respect and affection by many outdoor people down Jersey.

Pages from the Past of Kural New Jersey

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ROBERT J. SIM



New Jersey Agricultural Society
Trenton, N. J.

1949

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Foreword

The aims of this study are to publish illustrations of things that were used during the earlier days in New Jersey and to put on record data concerning their origins and uses. There are some utensils, tools, gadgets and other possessions whose functions can now only be guessed at by the present younger generation. Other things of early origins are still so well adapted to the uses for which they were conceived that they, or nearly identical types, persist as companions of our lives today.

Antiquarians are fighting, all too often, a losing battle with junk collectors, fires, bonfires, and people who feel that they and their possessions must be up to date—and may the devil take the hindmost! To save what we can of knowledge of things, methods and customs dating from former years, we have had many pleasant and fruitful talks with older citizens as well as with younger people who have preserved the recollections of their elders. Also, the researcher in folklore and all that's connected with it is not averse to prowling in old dump heaps and excavating ancient cellar holes. Fortunately the dealers in antiques are a constant help in that they save many old things that otherwise would have been destroyed. Librarians have combed their shelves for desired information. Museum curators tell us what they know. One professional searcher of deeds and records has ferreted out valuable clues.

And then—there are the collectors. Somewhere there is one who makes a collection of just about any sort of thing you might mention—or something that you might not. One person will specialize on a single category of things and so continue for a lifetime; another, for the sake of variety or to broaden his outlook, occasionally changes over from one field of collecting to some other. Either way considerable research is likely to be done, and as a result the collector becomes more or less an authority. The mere acquisition of a clutter of objects for

the sake of possession has no more real interest or merit than you could attribute to the habit of a packrat or a magpie. No, a collector worth his salt is a person of parts. In the belief that certain short cuts are admissible, the writer of these notes on rural New Jersey antiquities has tapped the minds of many collectors, and—if one must carry the figure on—there has always been a good flow of sap. And please, Mr. Collector! I am not implying that you are a "saphead."

The people who make things are a very important source of information. There is hardly an up-and-coming craftsman in any line who will chant with the cockroach, "What was good enough for Father and Mother is good enough for me." But your wise producer in any craft, though looking forward, will be firmly seated in the works and methods of his predecessors. The weaver of today is likely to know a lot about the doings of the great-grandmother who spun her own yarn and "biled" her own dyes. A metal craftsman that we know never misses an opportunity to study the handiwork of some blacksmith who made the sparks fly a century or more ago. A bayman down Barnegat way will point with pardonable pride to a duck decoy cleverly whittled out by his son, "But here," he will say, patting the back of another, "is one built by Hen Grant fifty years ago." And looking at this old bird you almost expect it to nod its head—as a Mallard or Black will do. . . Yes, there are many ways to gain some knowledge of bygone days, but sometimes it's "pretty hard sleddin."

In thinking of rural things we must not assume that everything way out yonder is crude or even countrified. Far from it. There were, as there are now, country seats with all that money and good taste could bring: up-to-the-minute farming equipment, sophisticated furnishings, well-kept gardens and lawns, chinaware and silver from the Old Countries or of our own make. Nor is everything rural limited to agriculture. In early times, as now, farming combined or alternated with fishing, trapping, gunning and various industries or crafts. Not many weeks ago a farmer in Cheesequake was very busy with his helpers picking tomatoes and peppers, but he took

time out to show his favorite eel spears and clam rakes, ancient and modern. A "dirt farmer"—and a good one—of Hancock's Bridge is now getting the traps ready: for his muskrat meadows, banked a century ago, are a source of important income. A glass blower in the old days could well be known for the quality and kick of his applejack.

So it goes. How are we to draw any definite lines of demarcation? And now, the froth being out of the hottle, to get on with our notes.

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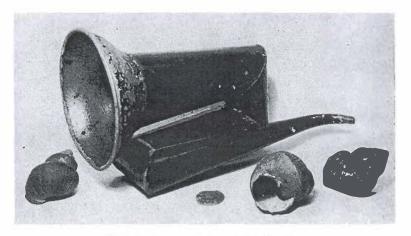
Frontispiece, Rudie Reidenbaker with eel spear and snapper "proge"
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"Hey?"

If the convolutions of a snail or a winkle could be straightened out, the resultant not-so-stately mansion would be a mere uninteresting tube without curves or turns. When laid out end to end it would take fewer of them to reach from here to there, but there would be little if any advantage in that.

The eight and a half-inch ear trumpet shown here was found in the attic of an old house up Jersey. The tinsmith who made it knew his winkles. True, he didn't aspire to the making of graceful curves, but by folding the lengths of tapering tubing back and forth upon each other he did save something in linear footage. And the little old lady hard of hearing could whisk the thing up to her better ear without becoming too conspicuous. Moreover, this compact "ear whistle," as is, could be carried about in a handbag, whereas, straightened out to its full twenty-five inches of tubing, it would require something like a golf bag.

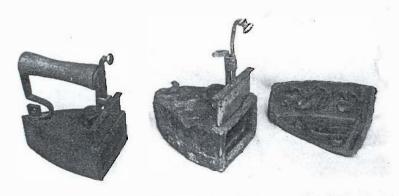


Old ear trumpet from North Jersey. Large fresh-water snails from canal barge basin, Trenton.

Come to think of it, perhaps we should all equip ourselves with, as one might say, mental hearing aids and listen more attentively to the reminiscences of our elders. They are our only living contact with the days beyond recall.

3883





Top row:. Two flatirons marked Loring, made at Grenloch, N. J.; one tailor's goose marked Savery, Philadelphia.

Middle row: A hollow brass iron from Fort Dix neighborhood; a charcoal iron from Schealer Ridgeway in Barnegat; an English iron of the eighteenth century.

Bottom row: A hollow iron with wood handle and slide-up door, found near Columbus, N. J.; two fragments of similar irons from eighteenth century England. This type is made for thrusting in a heated piece of iron. A small brass knob above door.

Sadirons

For all the laundry companies whose delivery trucks will call at your door, there are still many women who have to "do the ironing." However, it is only in isolated homes that they press with those solid cast-iron things to be reheated at intervals on the kitchen stove. Not all such flatirons that we now use (Oh gosh!) as book ends were cast in this country: some were made in Europe and shipped over, with much other merchandise, in the eighteenth century. One such that we illustrate is almost a twin-sister to those cast in the Loring factory at Grenloch, New Jersey, within the memory of people now living.

There are old irons, of goodish sizes, with pointed front ends; there are little ones with snub noses—used, perhaps, for pressing sleeves; then there is the big long kind called the tailor's goose—now rather handy as a doorstop. But none of these has the quaintness of those hollow ones heated with glowing charcoal or with a hot piece of iron slid in through the doorway at the back. Both of these types have turned. hardwood grip-handles—cooler to grasp.

The charcoal iron is a bulky thing with curved chimney rearing up in front of the wooden grip. The entire top with the handle comes off for the putting-in of hot "coal." In the back is a little draught hole with a small, cast-iron ornamental cover that swings down over it. Our example came from the attic of Schealer Ridgeway's house in Barnegat.

The complete specimen of cast iron with slide-up door was found near Columbus. Aside from the curled uprights and the brass knob to the door-lift, there is no attempt at decorative effect. Only the floor inside has a raised design. The maker's stamp on the door is all but obliterated.

The two incomplete irons that came over in a ship's cargo during the middle 1700's closely resemble the one just described, but all the inside surfaces have simple designs in high relief. On each side-wall are the letters C A Rⁿ. This may be a contraction of the name Carron seen in raised letters on the solid iron example that came over in the same shipload.

Our thinner "iron" is of bronze with turned brass uprights: a very different looking utensil with hinged iron door having a tiny "monkeytail" latch. The entire top is neatly engraved with a large central wheel motif and small border elements. This interesting example came from a little old house that was demolished on a part of the Fort Dix Military Reservation.

All these things are a far cry from the well-regulated electric irons of today. Their various types are likely never to be repeated in production—unless the evolution of household equipment has to be started all over again.

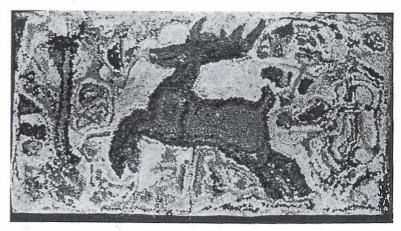
Hooked Rugs and Others

Many a commonplace feed bag or gunny sack, combined with vestiges of old clothes, has been transformed into a rug of high artistic merit. Using the burlap for foundation, narrow strips of cotton, silk or woolen cloth are caught on a small hook and pulled up in low contiguous loops through the meshes. The design may have been stenciled on the sack cloth or perhaps it was sketched in freehand with wax crayon, ink or a stick of charcoal. The chances for beautiful results involve a number of factors: primarily, the line composition, the balance of tone-space and the color harmonies. Of course, texture and the evenness of the hooking are important.

As some believe, the origins of hooked rug-making may have been lost in the mists of Scandinavian antiquity. Here in North America, one of its periods of popularity is said to have been around Civil War times. Many motifs were used: geometric designs are, perhaps, the most satisfying, but conventionalized flowers and birds were always in favor. Then too there are more or less pictorial representations of pets, game and farm animals. Primitive landscapes are found occasionally and, along the seaboard, clipper ships came in for some popularity.

There is always someone making hooked rugs. Today, hidden quietly away in farmhouse or suburban town, there are rugs in the making—rugs that are grateful to the eye and comfortable to live with.





Hooked rugs

Upper: By "Mrs. Mac" of Lebanon, N. J. Lower: A buck from The Pines near The Mullica.

The two examples that are shown here are not old. The one of a primitive covered-wagon scene was made recently by Mrs. P. D. McCarthy of Lebanon, N. J. The surface is even, the colors mellow and harmonious. The materials are mixed—wool, cotton and silk. "Mrs. Mac" has done rug-hooking for years. The designs are spontaneous and sketched in free-hand. The other rug may be twenty-five or thirty years old.

Though it came from the piney deer woods down Jersey, the galloping stag was likely copied or stenciled. That background, however, must have been improvised; it has a wildly irresponsible look, but is not altogether unpleasing.

Since time out of mind, people have made coiled rugs by sewing together braids of narrow cloth strips. A braided rug, if well made, is durable and warm to the feet. It has no possibilities in the way of complicated designs or patterns, but if the colors are carefully chosen and combined in pleasant sequence the results are very satisfying. Of our present-day rug-braiders, Fred Jackson of Malaga is probably at the top, but Marjorie Hammell of Absecon is a close runner-up.

Samplers

In the good old days long before the advent of the zipper, the movie, the atom bomb and tweezered eyebrow, little girls were taught their stitches. Each was expected to make a sampler—or exemplar as it was originally called—to learn and exemplify various kinds of needlework. Moreover, the letters of the alphabet, done in several styles on the sampler, could thus be kept as patterns for marking table linen, blankets, and various oddments of household textiles.

Samplers were made in the sixteenth century and on well into the 1800's, but the greatest numbers are said to have been done, in America, between, say, 1730 and 1830: a century of stitchery. The earliest ones were tall and rather narrow, convenient for rolling up and storing away; later on, samplers were cut square or rectangular in shape. At first the needlework was pretty well limited to alphabets and numerals, but in the heyday of its popularity the sampler often became a hodge-podge of miscellaneous motifs: flowers, birds, quadrupeds, houses, trees, human figures and geometric designs, along with the A B C's and maybe a map. Sayings or a few rhymed lines were often stitched in, and nearly always the date of completion as well as the maker's name and age. The embroidery is likely to show several styles of stitches all done with beautiful precision.



A very fine sampler from Caroline Allinson of Yardville, N. J., by Leah Ann Alsop, 1828.

The foundation or base on which the work was done is usually a thin, open-weave scrimlike fabric which, in many examples, has toned with age to a buff or even amber-brown tint. When homespun linen was used, the background is pale buff or drab. As a rule there is more bare space than actual stitching on a sampler. Sometimes several colors of thread were used, but while certain ones retain their pristine brightness others are now faded to approximately the tone of the background.

As for the lines embroidered on samplers, some of the pious or florid sentiments must have been suggested by parents or teachers, while others—often naive and usually gloomy in tone—surely originated in the minds of the little



A fine sampler from Caroline Allinson, by Rebekah Jones "in the twelfth year of her age." The date could be 1730, 1750, or 1780. In each of these samplers the designs are done in several colors.

lasses who did them. Two fine samplers, each about a foot square, were seen in the old home of Caroline Allinson near Yardville. One of these, signed Leah Ann Alsop and dated 1828, has a single fancy type of alphabet letters across the top quarter; the center, a six-line "extract" from a serious poem. Below this a strongly embroidered basket of fruit and flowers has a fruit-filled vine springing up at right and left. Beneath the basket lies a fairly realistic dog with gleaming eyes. On the left of the dog are the girl's parents' names and dates, while on the right side we see the names of a half-

dozen siblings. The other fine example, dated 1750, has a great variety of small design units rather evenly and closely spaced—an almost Egyptian effect most skillfully done. Two small frames contain what seem to be religious sentiments; then in addition to scattered pairs of initials two transverse lines of lettering read: "R. J. was born in July the 7 day at 8 o'clock at night 1739" and "Rebekah Jones her sampler made in the twelfth year of her age." Throughout the sampler all J's are like I's.

We may well admire these lasting but delicately done pieces of work. They lose nothing under scrutiny through a reading glass. As William Morris Hunt said of pussywillows, their beauty is intimate rather than general. At the same time, some are mildly amusing. Now here is an eightinch square of homespun linen with nearly all the needlework in dark blue. Below three lines of large alphabet letters in the upper third and a row of three small pot-plants, now faded, in the middle third there are three lines of words:

"Lydia Thompson. July. 1818 blooming and fair as an April fl Owr Looses oblivions chains."

Wow! . . . Another sampler is a swatch of sheer linen, now a brownish tan, sixteen inches tall and half as wide. In addition to alphabets in four types of lettering and various kinds of stitches, there are diverse flowering plants, two little dogs, a squirrel, two doves with an olive branch between them and two others without; in addition to these items, there are 3 diamonds and an eight-pointed star. All this, in conventionalized forms, was embroidered in many bright colors. It was done by Theodosia French in 1816—but the "year of her age" has been devoured by a scuttle-bug or something. Above the signature and date at the bottom are these lines rather clumsily stitched:

"As one day goes another comes
And sometimes shews us dismal
As time roles on new things we see
Which seldom to us do agree"

Ho hum!

Quite likely the little girls of those days were as variable as little (and big) girls are today. Some could stitch away for hours on end, whereas others would get ants. Heigh-ho!

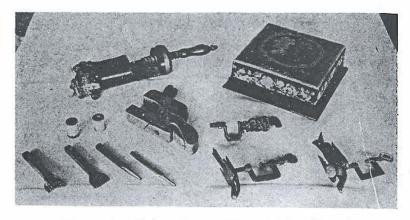
Sew Its Seams

Eve, we can assume, had very little sewing to do. But some time subsequent to her day the ancient sisterhood of semp-stresses came into being, not as a well-organized guild or union but in a comfortably loose and gossipy fashion. Then for centuries most of the women at home spent much time snipping and plying the needle. There are elderly people still hobbling around who can recall when a great deal of sewing was done in the household. Every little town had a "sewing circle"; every village supported a dressmaker, who either did the work in her own home, or came to the house as many days as were needful.

Before the invention of the sewing machine, everything in this craft was done by hand. Several items of equipment were required. We still have an old lapboard, with its large scallop cut into one edge to fit around the front of a seated seamster. I have heard it inelegantly referred to as "the belly-button board." Somewhere else, of course.

Among the small utensils there were tape-measures, commonly bright yellow, and shears that often slid off to the floor with a clatter. A pair of little buttonhole scissors came in handy, and there were always needles and pins, needles and pins.

Who can say when the ancestor of the sewing bird made its appearance on the edge of the table? We have seen a few primitive but cleverly made contraptions of wood, each with a bill-like clamp for holding a piece of sewing and a thumb-screw for fastening the thing temporarily to a table edge. By the 1850's, or thereabout, evolution had done its work: the slender, swallow-like bird—feathers and all—in cast iron, brass or bronze was in our midst. While this amazing little



Four sewing birds and some other related equipment.

creature could neither fly nor chirp, it could do the one thing needful—grab a pinch of cloth and hold on till further orders.

The coldments of sewing equipment shown in our photograph are mostly in the collection of Mrs. Wilfred B. Wollcott of Riverton. In the background at the right may be seen an old, beautifully constructed, squarish thing of wood covered with a fine piece of needlepoint over padding. This, I'm told, was a rest for milady's elbow while she did her needlework! At the left back, is a polished wooden object that fastened to a chair arm or table edge, but the top merely ends off with a pincushion. Around the edge of this are small bells—to be tinkled in case Junior demands a moment's distraction. In the foreground lies a set of steel "pinking irons." These were used sixty years ago by Mrs. Weiss, the mother of Harry B. of Highland Park, New Jersey. When not employed for their intended function of cutting serrated scallops on the edges of petticoats, they served as pleasant playthings for the growing boy.

But now most of these engaging gadgets are things of yesterday. Anyhow, there is rather less of patient stitchery done at home. Or so it seems.

Darning Eggs

No one would be so rash as to say that darning eggs were laid by sewing birds. There is a degree of relationship, but not that close. Sewing and darning belong to the same family but different species—each, we may assume, continuing true to type.





Upper photo: Eighteen darning eggs of wood, two gourds. Lower photo: One of stone; eleven of blown glass.

Practically any small object with a hard, smooth, curved surface can be thrust into the toe, heel or leg of a stocking or sock to spread the meshes around the edges of the hole that is to be filled with darning. This thing may be the size and shape of a hen's egg, it may be spherical or even mushroomshaped, it may have a short grip handle or not. Most darning eggs are of wood or glass, but small gourds have been in favor probably for centuries. We have one small stone—a smooth,

hard gravel stone—now polished and darkened from many years' use as a stocking darner. It came from the workbasket of an elderly Haddonfield housewife of former years.

One of our gourds is from Mrs. "Dick" Grant of Barnegat. It was used by her grandmother, Sarah E. Parker of Parkertown, sixty or more years ago. The other was in the workbasket of Ace Pittman's mother in Mount Misery.

A small ebony darner with sterling silver handle may have come from Europe. The one in its wineglasslike standard—all of laminated wood, highly polished—is a German job. The well-worn rectangular block of pine with initials carved on it was in a buttonbox in southern New Jersey.

The free-blown glass examples, somewhat variable in shape, are variable also in color. One is colorless clear glass, another is aquamarine. Medium green and deep blue are represented by one each, but amber—pale or deep—was more often used. The handleless egg of white milk glass with pink, red and pale blue streaks hails from Port Elizabeth. Its surface is almost uniformly dulled from long use. It must have seen the inside of many a dark-toned sock: the stocking darners of dark hues are more suitable to use under light-colored fabrics. Contrast, you know. See where you're going.

A single darning egg may seem a negligible item, but a group of twenty or more is rather impressive.

Inkwells

No one who considers the smaller items in old households can fail to feel an interest in the inkwells of former times. Probably the name itself originated in the frequent practice of sinking a short squatty bottle below the surface of a writing-stand—as we recall the little well for ink in the upper right-hand corner of a school desk. For general use, though, the container to dip a pen into sat in full view and such would be made with some degree of ornamental shape or pleasing design. As for materials used in the making, we find a considerable variety: glass, red clay, salt-glaze stoneware clay, porcelain, pewter, silver, wood and even cork. In either of the last two there is a glass inset—a well—to hold the writing

fluid. There are, of course, large and elaborately ornamental "ink stands," but our observations will be limited to the smaller everyday sorts of things.

Before the steel pen was invented a goose-wing quill was cut obliquely to a point which was split a short distance upward. There were men expert in cutting quills. Through the first half of the 1800's many rather large, flat-cylindrical inkwells of wood, redware and stoneware had three or four small holes away from the centrally located well hole in the top. These were to stick the quill pens into when not in use. The clay inkwells of this type were in use in the 1700's. For instance, George Washington is said to have used one. Fragments of two similar examples were dug up on the site of the Bissett stoneware factory in Old Bridge on South River. These date from the early part of that factory's operations say before 1820. One of these two had been neatly scalloped around the top margin as well as being concave in the sides. The plainer wells of this type have straight vertical sides. Some are sparingly decorated with cobalt blue. A very plain straight-sided one was dug up by William Reid forty-seven years ago in the garden of the old Birdsall homestead at the north side of Waretown.

Our one pewter inkwell with hinged lid and three quill holes was found by Isabel Hammond in South Jersey. It has no maker's mark, but likely came from the shop of some early nineteenth century pewterer in Philadelphia or New York. Pewter inkwells are not common and marked examples are quite rare.

Turned out in several sizes, the thin-walled wooden inkstands, shaped like miniature cuspidores, are fitted with a glass bottle in the center. There are usually three pen holes in the top and a string just long enough to tether the little cork stopper. The glossy concave sides are usually brown, frequently variegated and sometimes with gilt spread-eagles —apparently stenciled on. A printed paper label is often found stuck on the bottom. Though this type of inkwell was probably made in various places, many are labeled "Manufactured by B. SILLIMAN & CO. CHESTER, CONN."





Upper: Various aquamarine glass inkwells made in nineteenth century, South Jersey glass factories. The heavy iron mold for making a "hump-back" came from the Clevenger Brothers' glass house in Clayton, but was formerly used in some earlier factory. The three-piece mold inkwell of black glass at the right, was found in North Jersey by Johnson of New Market. It was made at Coventry, Conn., in the early eighteen hundreds.

Lower: Left background, three large wooden wells made in Connecticut, mid-nineteenth century; two lead-glazed redware ones at right. The rest are salt-glazed stoneware, the plain one near right dug up by Will Reid in Waretown. The two fragments are from The Bissett, Old Bridge, pottery dump.

Small square inkstands of cork are less numerous. Each, of course, contains a central glass bottle. These are said to date from the 1700's.

Around the middle of the nineteenth century, many glass factories in South Jersey were producing thousands of little "inks," usually in aquamarine but some in green, amber or blue. Each was blown in a heavy, two-piece iron mold. The most common form is that with broad bottom and sloping paneled sides. The next most in favor was the "hump-back" with the short neck off at one side. Both of these types have been dug up on sites of factories that flourished from the forties into the sixties. When thus remaining buried in the ground through many decades, these little things often get "sick"—the glass deteriorates, the gloss disappears, the surface occasionally becomes opalescent or scales off in thin flakes. We have excavated inkwells of these shapes in the glass-house sites at Bulltown, Crowleyville, New Brooklyn, Winslow and Port Elizabeth. Some have pontil marks, others not.

Red earthenware "inks," commonly having a black lead glaze, were turned out in most of the small potteries of the nineteenth century and doubtless before.

The little brown stoneware ones, cylindrical or conical, have no quill holes and probably came in with the steel pen. We may assume that they were contemporary with the Spencerian system of handwriting that was popular during the latter half of the preceding century. There are still people who remember using them in school days.

To be counted among the goodish things that have from time to time slipped in across the borders of New Jersey is a little "black glass" inkwell that was blown in a three-part mold. More than five score years of pushing around has resulted in much wear on the bottom, but otherwise it looks like new. Though found here, this little piece of glass came from a factory in Coventry, Connecticut, and was blown when the nation was young. There is much of old New England to be found in New Jersey.

Pewter

The days of really good hunting in the quest for early American pewter are gone forever. There have been too many Laughlins and Kerfoots (one each!) and too many wars. In the Gettysburg battlefields, at San Juan Hill, in Flanders Fields, there may lie buried basins by Bassett and teapots by William Will, but these would be in the forms of "minnie balls" and steel-jacketed bullets. Much fine old pewter and brittania metal doubtless went into the melting-pot along with pieces of lead pipe from discarded kitchen sinks. Museums and collectors now have the best of what remains. Some rare plates, porringers and teapots still garnish the mantle shelves



Old pewter and brittannia metal

The two plates are of English make. Five small lamps burned camphine (rectified oil of turpentine). Whale oil lamps have shorter wick tubes.

The soft pewter porringer in foreground was made and marked by J. Danforth of Connecticut.

Inkwell and cuspidore fairly rare but unmarked.

and corner cupboards in private homes, but searches through garrets and shops yield very few pieces with makers' marks on them. Pewter plates and chargers having London trademarks are not scarce, but American-made pewter in either flat- or hollow-ware will not be found so often.

Pewter is a gray, soft alloy of tin, copper, antimony and sometimes lead, all in varying proportions. "Brittania metal" is a harder material containing more copper and tin and was popular through the middle 1800's. When frequently

rubbed—preferably with the bare hands—the surface of old pewter takes on a bright polish softer and cooler than that of silver, but somehow more heart-warming. In the 1700's there were pewterers in Philadelphia, New York and New England who made great quantities of flatware; six-inch and eight-inch plate men, they are called. There were others who specialized in lidded ale-mugs, teapots tall or squatty, tablespoons, pepper shakers, lamps and many other things to take the places of the wooden or "treen" ware used in earlier times.

To make a spoon, the molten metal was poured into a small, two-piece mold of bronze or bell metal. The reinforcing raised line that tapers to a point on the back of the spoon-bowl is the reason for calling this type a "rat-tail spoon." Sometimes initials and a date are found rather crudely engraved where the handle would be formed inside the mold. Of course these would be in reverse on the spoon itself, so we may suppose they were scratched there by the owner of the mold. Perhaps this was the only one in the community and would be borrowed by various people in the neighborhood. We have such a one that was long imprisoned within a wall of an old Lower Bank house. It came to light when a partition was ripped out by the father of the old man who had it.

The earliest pewter receptacles and dishes were hammered into shape, but later ones were molded or spun on a sort of lathe. A great prize for any collector or student of this craft is a chest of tools that were used by some early American pewterer. Like potters' tools, most of them vanished long ago.

Spouted Pitchers or Cruses

A year or so ago Oliver Saylor, who has an eye for antiquities, called my attention to some neglected crockery in a large old Princeton homestead in that section called Jugtown. This house is a couple of blocks from the site of the early redware pottery of the Horner family.

Among other things there was a spouted pitcher that, in size and form, almost exactly resembles those represented by many fragments unearthed at the 1776 Cheesequake stoneware factory location. Though the bottom was gone, this Princeton specimen is the only almost perfect example thus

far found. Fragments of similar, brown, lead-glazed ware and part of an identical ribbed handle were excavated in dumpings from the Horner establishment.

The height of the Princeton thing is eight and a half inches; the tubular spout is two inches long with a somewhat flaring hole five-eighths of an inch wide at its base. The pot was turned on a wheel, a round hole cut through the shoulder and the spout applied over this. On the outside the fusion is smooth, but inside not so good. The dozen or more stoneware spouts found at Cheesequake are the same in this respect.



A spouted pitcher in lead-glazed redware, found in Princeton.

Fragments of similar containers in salt-glazed stoneware from Cheesequake. These date from 1775-76.

Although this type of thing is suggestive of a batter-pot, the spout seems too small to pour batter readily; and the rough inside attachment of it would make washing difficult. It seems more likely these old cruses were for serving beer, ale or cider—along with a drinking mug—in the taverns of those days. German cruses or krugs were built along similar lines.

While the rich brown example from Princeton has merely a few dashes in black around the bulge, the Cheesequake stoneware ones were variously decorated with deep cobalt. One even had a strange, blue, zebralike animal done in sgraffito on the sides. A very special effort, that was!

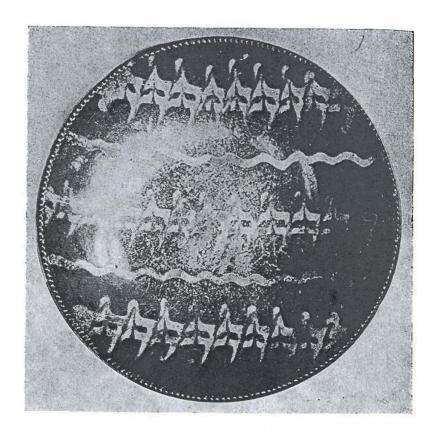
Any opportunities to examine additional American-made spouted pitchers would be snatched at forthwith.

A Trenton Pie Dish

An interesting discovery in the potter's art is this eleveninch pie plate of slip-decorated redware stamped "J. McCully Trenton."

Joseph Styles McCully, the latest potter of that name to work in Trenton, had a small factory for redware near the present Reading Railroad Station. This was operating during the first half of the nineteenth century. But before him came two consecutive McCullys named Joseph, the first of whom started a small "pot baker's house," a block or two away, early in the second half of the 1700's.

We think that our pie dish, with its rare maker's stamp in a small oval on the unglazed back, was made by one of the earlier Josephs. The so-called "combed design" in white clay, glazed over with the orange-yellow lead glaze, is a trick used by English potters in the eighteenth century. Though hundreds of American pie plates have been examined, this is the only one thus far seen with the "combed" decorations. There seems little doubt that it was made before Trenton won the title of "The Staffordshire of America."





Eleven-inch, slip-decorated pie dish marked "J. McCully Trenton."

An Old Bridge Pottery

There is still some confusion in our knowledge of stoneware factories at Old Bridge in Middlesex County. We know, however, that from early to middle 1800's there was one such establishment between River Road and the west bank of South River at the northwest edge of the town. Its former location is easily recognized by numerous shards and props in the muddy bank near which timbers of Obediah Herbert's dock are visible. This part of the village is still known to some as Herbertsville.

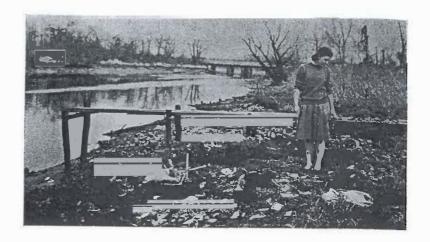
According to local tradition and early records, the factory that we know of belonged to successive members of the Bissett family from at least the first decade of the nineteenth century to 1855. The only dated fragments of stoneware found on the site are marked 1846 and 1848. The land had been deeded to one John Bissett in 1755, but we have found nothing definitely to indicate when the pot factory was started.

In Clayton's History of Union and Middlesex Counties, 1882, we find this statement: "Gen. James Morgan and Jacob VanWickle, soon after the close of the Revolution, put a pottery in operation (in Old Bridge) which was continued until about 1828. A second establishment of similar character having been started by some of the Bissetts about 1815 which was in operation till about 1830."

The dated 1846-48 fragments and the 1860 census giving Evert Bissett (age 55) as stoneware manufacturer indicate that Clayton's last date, 1830, is incorrect. Shards from the oldest deposits of the dump are of types characteristic of a nearby pottery operating between 1806 and 1815. Some of them seem to date from an even earlier period.

If Morgan and VanWickle had another factory somewhere in Old Bridge, the site of it has not been found.

In this connection it should be mentioned that VanWickle is said to have owned or operated the stoneware factory that existed in the first half of the nineteenth century near Herbertsville (then called Old Bridge) on the south side of Manasquan River, Ocean County. Many of the shards found there resemble the later ones from the Bissett site.





Old Bridge Stoneware

Upper: The "dig" at Bissett factory site, with Frances Veal holding fragments of a sagger.

Lower: Small jar and three bottles, jug of middle period, two ovoid jars of 1846-48 period, a whiskey flask. In foreground, fragments with impressed, coggle-wheel decoration, early period.

Even thus far you can see that many complications are involved.

Now the dump of rejected stoneware from the Bissett factory occupies several square rods along the river edge. Much of it is covered by a house, lawn and garden plot, but thousands of shards, wads and props were buried to a depth of three feet in wet mud of the sloping bank completely covered with water at high tide. Evidence indicates a succession of four periods, or perhaps four different potters, in the life of the factory. These various styles of craftsmanship are characterized thus:

Period 1. Inside glaze thin or absent; outside glaze sometimes thin and poor. Forms graceful, bases small. Jars with medium-height, straight collars. Horizontal curved handles completely in contact with shoulder. Jug handle with both attachments on shoulder, lower attachment smoothly flaring. Neck with or without several encircling, incised lines. Shoulder of jar or jug with two or three parallel incised lines—usually wavy. No color decorations.

Period 2. Glaze as above, but better. Jar with narrow collar. Jug handle with upper attachment flush with mouth. Encircling, impressed decoration on shoulder and (or) collar often of complicated design made by coggle wheel; four motifs found. Sometimes a few simple broad strokes of cobalt on shoulder. This period coincides with that of J. Letts at Cheesequake, six miles away. A great number of 6-inch cylindrical bottles and numerous flattened pocket flasks were made.

Period 3. Forms, glaze and handles as above except that lower attachment of jug handle has sloping, transverse depression made by dragging finger. Jars with narrow collar. The only decoration, a simple 4-stroke plant motif in cobalt on shoulder. Jug neck without encircling lines.

Period 4. Extending into the middle 1800's, this phase exemplifies the decadence of form in hollow ware. The jugs and jars, while still ovoid, lack the graceful curves swinging up from the small base of earlier types. The big jar shape has a 2-inch collar extending well above the two curved, horizontally attached handles. There is now the lid with fit-in flange. The lower attachment of the jug handle is prolonged into a short, pointed tip—not long enough to be called a "rattail." The color decoration becomes a tall, narrow, upright stem with four broad, horizontal, brushed-on leaves—all in deep cobalt—with touches of same at handle ends. And here we have the first appearance of the dark, chocolate-brown Albany glaze smeared on the inner surfaces of hollow ware. The brushed-on date, 1846 or 1848, is sometimes on the shoulder of a jar, with the four-leaf motif on the opposite side.

A part of only one chamber pot turned up in this dig, while many were found in the 1776 Cheesequake site. Fragments of two delicately made flat inkwells were found in the early, deep layer of the Bissett factory dump, and two or three pitchers, with Albany slip inside and out, evidently came from the latest period.

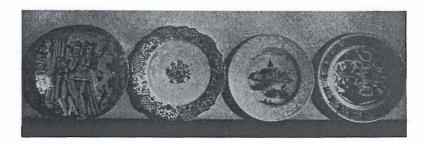
The intermittent diggings in this uncomfortable site extended over a period of three years and were encouraged by the property owners, Alois and Leo Krug. The Veal family, who lived in the house there, supplied various conveniences: they roused the weary excavator with hot coffee and cheered him with fresh crullers and hopeful words. But in spite of all persistence and help, no piece of stoneware with the maker's name on it ever turned up.

The generous efforts of Miss Tam D. Conover, of Trenton, are responsible for searching out old records; they at least throw a few gleams into the obscurity of our subject.

Delftware in America

To most people the name Delft has come to mean anything white decorated with a soft shade of blue. Much of the more or less properly so-called delftware that was made in Holland and England is like that. But there we have a sort of general misconception, for much polychrome delft also was made with handpainted decorations combining several colors. Also there is plenty of blue-decorated white crockery of entirely different kinds.

To collectors and students of pottery, delftware means baked clay dishes and other objects composed of a rather soft, porous body or "paste" coated with a hard whitish enamel of tin oxide; not, of course, with a metallic tinny appearance but an opaque white, different from that thin glossy glaze of lead oxide seen on most of our white crockery. French and German faience as well as Italian, Spanish and Turkish majolica are structurally similar to Dutch and English delft; in all, a buff or drab clay is coated with the tin enamel. In all these the surface is likely to have a few "pin holes" or minute dimples—especially on the undersides of the dishes. In firing in the kiln that white coating doesn't fuse well with the porous clay under it, so in course of time the enamel is likely to be chipped off in small flakes, especially on the edge





Upper: Four tin-enamel plates—all early examples. 1. Blue on white, probably Italian; 2. Polychrome faience, Rouen, France; 3. Blue and white on pale gray ("bianca sopra bianca"), Bristol, England; 4. Blue on white with yellow margin, probably Holland.

Lower: Polychrome Dutch delft plate; bowl with blue fish on powdered purple, Bristol or Liverpool; polychrome bowl, English; polychrome and powdered purple mug—Dutch or German; handled wine-jug, blue on white, probably Dutch; blue on white, rococo salt (small open concavity in top) origin not here known; small Spanish-Mexican faience bowl, marginal decorations black, green and dull orange. Early nineteenth century.

of a plate or bowl. These chipped places absorb grease and eventually blacken. So much for recognizing tin-enameled ware when you see it.

There seems to have been no successful production of delftware in America, but during the eighteenth century great quantities of it were brought over from Europe. In the 1600's British potters began making tin-enameled ware in London and Bristol, copying the methods of the potters of Delft and other Dutch centres of ceramic work. Although some of the men around Bristol—and later, Liverpool—developed styles of their own, it is not always easy to say whether a dish or fireplace tile was made in England or across the Channel.

To the initiated, old delft and similar ware has a peculiar appeal and is much more fascinating than the pretty and more durable lead-glazed creamware that began to win favor in the late 1700's. In recent years much delft has come to America through the shrewd efforts of antiques dealers who have combed Europe for collectables of all sorts. Occasionally, though, we find a plate or a bowl that has been right here since colonial times when this type of pottery was the prevailing kind on the market. And we occasionally turn up long-buried shards of it in pre-revolutionary home sites. To some of us, even fragments are worth saving!

Crockery from Old England

George Hughes, amiable custodian of the historic brick house at Fort Mercer National Park, will always be held responsible for my awakened interest in early English creamware.

Some years ago when excavating for a cellar room beneath the old kitchen, he found a walled room that was completely filled in with earth, ashes and rubbish. This contained great quantities of broken crockery and glassware. With unusual discernment Hughes gathered up these shattered relics and stored them in crates, boxes and bushel baskets in the shade of an ailanthus clump on the river bank. Well, there they were, four years after, inviting many hours of sorting and months of intermittent study. Bushel by bushel I hauled them home—where, to tell the truth, they still clutter up another basement room. After so many pleasant hours of sorting, comparison and study, it's hard to chuck the stuff out; but what good is it now?

There must have been a lot of breakage in that old house, or maybe roughly-handled shipments arrived—barrels that got bounced around on ships in nasty weather. There are fragments of flatware, ranging from cup plates to platters, in blue-decorated Canton china; pieces of eighteenth Century English earthenware—buff with combed black loops and

scallops. But mostly the shards are from tableware of the early 1800's and made by many well-known potters of Staffordshire—lead-glazed creamware, this is, and not porcelain.

The color decorations are of several kinds. They could be lightly tamped on with a piece of sponge—thus producing the so-called spatterware—or applied by means of slip-cup or brush; but by far most of the dishes were transfer-printed—the color transferred on dampened sheets of paper from engraved copperplates.

The potters who used this "decal" method to decorate their wares make a long list. Enoch Wood, James Clews and Ralph Stevenson often used a rich, deep blue in printing their historic scenes and places of America—obviously done for the American trade. Others, like the Ridgeways, the Wedgewoods, the Adamses and many more, printed the designs in pale blue, medium blue, green, brown, mulberry, red or black. One design, popular over a long period, is the "willow pattern"—a conventionalized oriental scene adapted by Minton from Cantonware and thereafter used by Spode and others. Most of the scenic designs were minutely engraved and have a certain fussy prettiness, happily lacking in the handpainted pseudochinese decorations of the delftware days.

Of interest to many people here in Jersey are those sets of tableware, made by Heath, on which the scene shows "The Residence of the Late Richard Jordan, New Jersey." Here we see the portly Quaker gentleman sporting on the green in front of his dwelling near Camden. This popular subject appeared even on the set including washbowl, pitcher, etc., for the bedroom. But try to find such things now!

In the early 1800's the Adamses and the Davenports were strong on flat-toned, conventional floral motifs painted by hand in red, dull green, soft blue and black. Among these are the "Adams Rose," "King's Rose" and "Mimosa" patterns—both effective and pleasing in a collective sort of way.

Somewhat closely related to that style, though more shoutingly colored, is the "Gaudy Dutch" ware. A few years ago this was much sought for and brought rather foolish prices. Very likely it was intended to be used as kitchen ware—much as we used those dishes that came along singly in packages of certain cereals.





Upper group: A plate and pitcher with "Adams Rose" design; a "Gaudy Dutch" teapot; nine pieces of banded creamware. The black and buff banded bowl back of the "mocha" pepper was assembled from fragments that were saved by Mr. Hughes at National Park, Gloucester County.

Lower group: Pink lustre teapot and bowl; Sunderland lustreware pepper at left; "willow pattern" pepper at centre; Heath's plate with "the residence of the late Richard Jordan" done in black transfer ("decal") printing; cupplate in flown blue; small spatterware pitcher; states pattern pitcher and cup-plate printed in deep blue.

Some of the potters of Staffordshire and other counties made considerable "lustre ware." Pitchers are often found done in copper lustre. The bright metallic surface is a thin coating on a dark reddish clay body. In silver lustre the entire surface may be covered, though frequently the metallic effect is confined to conventional designs on a dark background. Pink lustre occurs as purplish-pink bands having a faint gold overtone. The background of white usually has a delicate floral design painted on in several colors. Sunderland lustre is purplish-pink throughout, with irregular pale spots as

though small bubbles had burst and left their light silhouettes there. This, too, has a golden sheen.

Banded creamware—variously ornamented with bands, lines and spots or the mosslike "mocha" designs—turned up in considerable variety in that Fort Mercer material. Some pieces were generously done in three or four colors while others were limited to black and buff on white. All are quite effective and some are strangely charming. The things most often seen in this ware are pitchers, teawaste bowls and quaint pepper shakers.

I could bear to find another treasure hole like the one discovered by George Hughes!

Old Teakettles

Nothing in early household equipment has a homier, more comfortable air than the old teakettle—whether of cast-iron or handwrought copper. When the large iron kitchen range with flat-lidded round openings in the top came into general use, the kettle was cast with a flat bottom which extended down from a narrow shoulder below the bulging sides. By removing a stove lid and setting the kettle into an open hole its bottom was brought into direct exposure to the flames of the fire. The earlier type of teakettle, to be hung on the crane or set on the hot coals in a fireplace, had a rounded bottom with three little projecting knobs to serve as feet. The spout of such an old-timer, instead of curving upward and out from the front of the kettle, comes out straight from well down on the front, then from an angle continues on more slender in a curve to the fishmouth lips at the end.

The copper teakettle is different in general form, though the spout is similar. The bottom is flat, the sides more nearly straight and the sheet metal used in its construction thinner than in the iron kettle. The seams of jointure are brazed in the form of shallow dove-tails that fit together nicely. There is such a seam around the bottom and another up the back, which reverses the arrangement of the old gray coat worn by Grimes. The bail is usually rather thin and broad, sometimes with the maker's name stamped on top. The fit-in lid may have a brass knob to lift it by.



Three Teakettles

Left: Copper, marked "I. Babb"—possibly English.

Middle: Early cast iron.

Right: Later cast iron.

These attractive copper pots for heating water are hand-made—some of them in America—and probably date from the eighteenth and early nineteenth centuries. They used to be found frequently, stuck away in attics and farm buildings; but now Jack Remensnyder of Metuchen, with the nose of a bloodhound but much less fearsome, has trailed many of them to their hiding places and added them to his excellent collection.

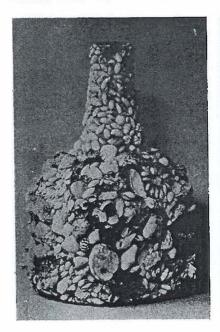
Before and After

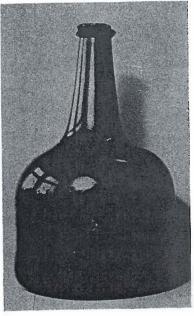
It seems that several decades ago people were moved with an irresistible impulse to cover old bottles and jugs with a layer of putty and stick on small sea shells, coins, buttons and other little items to make something supposedly ornamental for the mantel-shelf or the whatnot. In our eyes the results were anything but beautiful.

However, some of the jugs and bottles used for this purpose are, when cleaned off, not only good-looking but quite interesting as antiquities.

Here we show photographs of an eight-inch "black-glass" bottle before and after scraping. This squatty spirits bottle undoubtedly dates from the seventeen hundreds, but who can say whether it was made in America or in the old world?

Did it come from, say, Bristol, England? Or was it blown in the Wistarburg glass house in South Jersey? Bottle-tops and bottoms picked up on the site of that famous factory show almost identical characteristics. But of course we are always hoping to find something that was made by Caspar Wistar or some of his men. Maybe this is it!







Upper: Eighteenth century "spirits bottle" before and after removal of its coating of hard putty and sea shells.

Lower: Fragments of glass bottles dug from site of Wistarburg Glass House, near Alloway, N. J. Note resemblance to bottle shown above.

To any one interested in the consideration of antiquities, the Garden State is full of contrasts, contradictions and surprises. Some object that once graced a drawing-room in the deep South may be found standing cheek to jowl with something strayed down from the home of a damyankee in New England.

Discovered by the Carrigans in the garret of an old Medford house was a forgotten basketful of bottles. Among them were two plump whiskey flasks from the Hammonton glass house and three swirl-ribbed pitkins blown during the early 1800's in Ohio.

South Jersey flasks with raised designs on their sides are still to be found tucked away in attics and cellars, barns and old icehouses. For that matter, sometimes an old flask or bottle, freed by changing currents, bobs up from the muddy bottom of a stream near which a glass factory once operated.

There are long-neck calabash flasks and scroll flasks, but the shape most generally made is a bulbous bottle with somewhat flat sides and a very short neck. All were blown in molds and most of them have a raised design on each side. These designs show great variety. The portrait heads—usually in profile—include Washington, Lafayette, Franklin, Jackson and others. Jenny Lind, in a bust portrait, appears on some calabash flasks. Other favored designs are the eagle, stag, horn of plenty, clipper ship, bundle of wheat, bunch of grapes, etc.

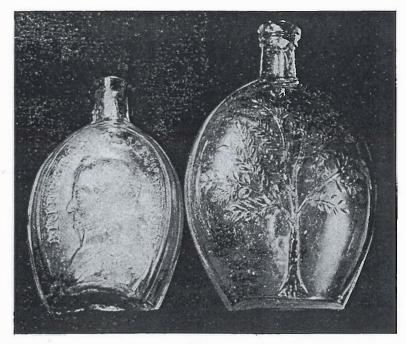
It seems that such flasks were being blown in the 1830's or earlier and the production of them continued into the sixties. Those in aquamarine (or "bottle green") are the ones most often seen, though varying shades of amber are not rare. Flasks and other things of bright green, deep blue or amethyst glass are less common.

During the whiskey-flask period (if we are not "corning" a phrase?) there was hardly a bottle factory in South Jersey that failed to make these quaint items. We have seen authentic examples from Bridgeton, Clayton, Hammonton, Bull-

town, Crowleyville and New Brooklyn-to mention a few localities.

Before glass came into general use for that purpose, these flat-sided pocket bottles were made of lead-glazed redware and salt-glazed stoneware. They were turned on the potter's wheel, then somewhat flattened with gentle pressure before baking in the kiln. A little redware pitkin with scratched-in decorations is said to have been made in a lost pottery of the Sourland Mountains. We have found imperfect stoneware flasks in the pottery dumps of Old Bridge and Cheesequake—these dating from the early 1800's.

The flasks of today are commonplace things and soon lose all interest—when empty.



Flasks
Two South Jersey aquamarine glass flasks.



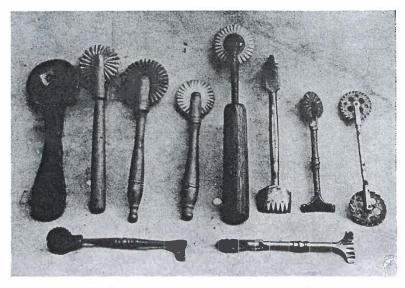
One small, rare pitkin, lead-glazed redware with incised designs. From eighteenth century pot house in the Sourland Mts., N. J. The site of this pottery not yet located.



Bottom row: From left, three salt-glazed stoneware "pocket bottles;" one nearly black, lead-glazed redware flask; one olive-green, redipped glass pitkin with vertical and swirled ribbing. Though found in northern New Jersey, this flask is probably from an early nineteenth century glass house in Kent, Ohio.

Pie Wheels

Geologically speaking, a shortish time after man had passed through the stage of being a mere burbling whatisit he recognized the usefulness of bone as good material for certain tools and utensils. In speaking of bone we can include the closely related but finer-grained structure of deer, elk and moose antlers.



Ten pie wheels and crimpers, the large one, right centre, home-made or by blacksmith.

Some pie wheels of the past century were made of bone. Brushing hurriedly over that story about the old cook who removed her set of false teeth to make a pretty waved margin on a piecrust, we move on to a consideration of those legitimate little implements used in decorating the tops and edges of pies. Those housewives who still do some baking—instead of slipping around the corner to the local delicatessen—almost always use something to make a pie more handsome. One will use her fingers to crimp the edge, and score the top with the point of a paring knife; another may apply the tip of a fork or the handle end of an old door key for the edge. But the

proper thing to use is the good old-fashioned pie wheel and crimper. Such a utensil can be picked up in a department store, but it will have a mass-production look—quite without the character of careful craftsmanship seen in older examples that have been "in the family" for fifty or a hundred years.

Here are ten old wheels. Three are entirely of brass, one heavy example is of bronze, a fifth is all iron. The nicely turned, double-ended brass one has perforated wheels resembling ratchet wheels from an old clock. All others of the ten have wheels with zigzag or wavy margins and all the metal ones have each an expanded crimper at the basal end of the handle. There is a homemade thing with roughly whittled oak handle and an iron fork to hold a fluted wheel of bone; the scalloped expanded ends of the fork save it from being quite commonplace. Of the four others with wood handles, two were turned on a lathe and one has a bone wheel. The bulky utensil with a hang-up hole through the flat handle has a large flat cutting wheel of tin joined to a smaller thick wooden cogwheel. This is surmounted with a small square of tin having four triangular teeth for stamping the top of the pie.

We have heard of whale-tooth ivory pie wheels elaborately carved out by seafaring men in their moments of leisure, but none has come our way.

Cake, Pudding and Jelly Molds

A circular, deep dish more or less fluted or corrugated inside and with the center of the bottom pushed up in the form of a slender cone—such is usually called a cake mold. We have seen these molds in tin ware, cast iron and yellow ware, but much more often they were made of red clay, the surface usually mottled with black and smoothly glazed with lead oxide. Though commonly referred to as Pennsylvania Dutch, some are known to have been made in the numerous small redware factories in New Jersey and elsewhere.

Within the general type there are many individual variations. The sizes range from six to twelve inches in diameter and two to four inches in height. Most were formed in molds but some were turned on the potter's wheel and fluted by hand.



Molds for cakes and puddings

Of the two tin pudding forms, upsidedown, the pear design is in sheet copper soldered on. In lead-glazed red earthenware, the largest cake mold was turned on the potter's wheel—waves then made by hand. The two others and the small jelly mold were cast—probably in plaster-of-Paris forms. Such things were done by the Wingender Brothers of Haddonfield, as well as by other New Jersey potters.

The "fluting" on the inside is sometimes straight and vertical but more often swirled. In diminishing widths, it usually continues up to the apex of the central cone—which is, in most, open at the top. This inverted funnel permits the heat of the oven to reach the inner parts of the sponge cake, and closely related species, for which the mold was intended. Salt-glazed stoneware tube pans were seldom made. Perhaps in them the cake "don't make" so well.

So far I have seen no redware pudding molds. The usual type is plain dull yellow as to body and surfaces. The shape is often oblong, the sides deep and the interior has a concave design representing a rabbit, an ear of corn, a bunch of grapes or some such practicable motif. The pudding molded in such a dish comes out with the design in relief, of course. With age and much use, these molds became stained to a shade of brownish buff.

We have seen little round jelly molds that were of either red or yellow clay. They often have an interior design of fluting and rounded depressions. It seems that yellow ware was produced in great quantities at most of the larger eastern and midwestern factories during the latter half of the eighteen hundreds.

Nutmeg Graters

We find a fairly extensive diversity of nutmeg graters coming from the nineteenth century. Every clutter of kitchen stuff in a country auction is likely to include one or more. They ranged, in style, from a simple roughly perforated tube of tin or thin sheetiron to a complicated contraption of iron, or iron and wood, to be operated by means of a small crank—like a miniature coffee grinder. Some were held in the hand but others were to be fastened to the wall or a table edge. Some were obviously homemade while others evidently were produced in small factories. Probably most of the tricky ones



Nutmeg graters. Three in foreground most recent.

in the latter category came down from the 1860's and '70's—shortly after the Civil War. Perhaps after that war, too, many men were racking their brains for not-too-strenuous means of making a living. We may even imagine one of these beaming with pride for being the owner of a nutmeg-grater factory. Of course the outfit may have extended its activities to turn out apple-parers, sourcrout cutters and sausage grinders: there were possibilities in such a project. After the splurge of Rube Goldberg inventions, the makers seem to have calmed down to a simple affair of japanned tin, a flat-backed thing with perforated convex front and small lidded compartment at one end for the storage of a nutmeg or two when not in use.

All these old-fashioned graters are on the way to being "collectable" now. Maybe nutmeg was more often used in puddings, pies and eggnogs, and perhaps it added something to the bouquet of a noggin of rum. Or could it?

Hand-Mills

A mortar and pestle might be called a primitive hand-mill, for they are two things used jointly for grinding chunks of more-or-less friable dry substance into smaller, or even fine, particles.

The mortar is a sturdy bowl-like container made of almost any durable, firm material—like hardwood, stoneware, glass, iron, brass, bell metal or stone. Into this are put the pieces of substance to be reduced in size.

The pestle is a clublike thing, usually of matching material, by which the stuff in the mortar is pounded or brayed. As a rule it is a one-hand implement and is wielded vertically with a pounding action or else in a circular motion—rubbing and grinding the contents against the curved sides and bottom of the mortar.

Sometimes in a sandy field we find the stone equipment used by the local American Indian of earlier centuries. A piece of stone with more or less of a hollow a few inches in diameter worn or picked in one or each side: this served as





Upper: Two types of cast-iron mortars with their pestles. In use fifty years or more ago. The foot-square Indian stone of quartzite, with a hollow on reverse side also, is no doubt a mortar. The smoothly shaped rollerlike thing of hard rock may have been used as a pestle: on the other hand, maybe such patiently made implements—some of them twenty inches long—were for rolling out flat slabs of clay to be cut into strips for pottery made by the usual spiral method.

Lower: The lathe-made mortar of hard wood—maybe sourgum—has a whittled pestle of white oak. This little mill may date from the seventeen hundreds, but the taller mortar, found in the Sourland Mountains, is much more primitive. It is of a type used by Indians.

a mortar, to be used on the ground or held in the lap. The type of pestle commonly found is a rollerlike stone six inches or more long and about two in diameter. The ends are often much battered or worn. Another sort of mill was a short length of tree trunk deeply hollowed at one end. The pestle was a straight wooden club enlarged at one or both ends. Such wooden mills as still exist may have been made by late Redmen or early white settlers. A small cylindrical mortar of this type, now in the possession of Byon Hankins at West Creek, was found in a very old house in the Sourland Mountains.

Almost every farmhouse had a mortar and pestle as an indispensable part of the kitchen equipment. There were spices and herbs in crude form to be ground for use in cookery; drug plants—or "yarbs"—and some mineral substances were reduced to powders used for medicinal purposes.

Many wooden mortars, some of them probably dating from the 1700's, were made by turning on a lathe. These are likely to be rather graceful in shape, and in substance range from native maple wood to the mahogany and coca bola of the tropics.

We see many cast-iron mortars with stemmed foot or with only slightly flaring base, that were made probably around 1870. Some are encircled with impressed bands of simple decoration and a few show the maker's name.

Old mortars of brass or bronze with handles—one on each side—are less easy to find. Early Dutch and Scandinavian ones are quite rare, but small brass examples of European types can be found in many shops. These are likely to be of rather recent make.

The old glass mortars and pestles that sometimes turn up are presumably from "apothecary shops" of yesterday rather than farmhouse equipment.

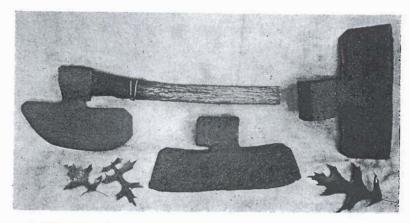
The Barking Axe

In Ancient Carpenters' Tools Dr. Henry C. Mercer illustrates one of these implements among carpenters' hewing hatchets. But to the shipbuilders down along the Delaware it is the old-time "barking axe" (no canine connotations?) that was used for stripping the bark from logs. Then the logs could be tapered by means of large draw knives and made into masts and spars.

The barking axe, fitted with its short handle, seems to have been a one-hand tool. The thin, rectangular blade is beveled on the right side only; there is no poll for pounding, and the handle bears to the right in order to clear the workman's knuckles from the log.

The half dozen specimens thus far examined are deeply corroded and pitted. One with the blade worn away at one corner was mounted upside down on a long axe-helve and had been used as a turf axe. William Sloan, a marine black-smith at Greenwich, has a barking axe with the old foot-long handle still in it, the only complete tool of this kind we have seen. A single-purpose implement it seems to be, light but efficient.

So here we have an ancient thing whose bite was worse than its bark.



Three examples of the barking axe. The foreground one has a small hole through each side for a nail to keep the axe from "flying off the handle."

The Adz, an Ancient Woodworker's Tool

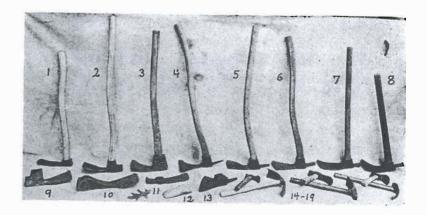
Adzes of several specialized types were very important tools in the hands of our ancestors. Today motor-powered mechanical devices have pushed them into the realm of things all but forgotten.

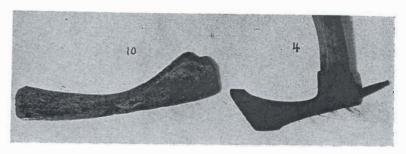
In contrast with an axe, the adz resembles a hoe in that its cutting edge is transverse instead of being in line with the "helve" or handle. The blade is fairly thick, the poll—or opposite end of the head—is short but heavy, and between them is the rectangular "eye" or hole for insertion of the wooden handle. It can be said that in any of its various forms an adz is an implement intended for chipping or dressing down the substance or the surface of wood that is not accessible to some other sort of tool. The carpenter's adz has a nearly flat cutting edge and a flat poll; the cooper's or caskmaker's adz has a curved head and gougelike blade. The sort used by shipbuilders is made with a broad cutting edge which may or may not be turned up at the sides. Extending on from the poll (or blunt end of the head) is a short, slender spike with a blunt tip. The railroad adz, used in cutting a flat channel across a tie for the reception of a rail, is a similar "lipped" tool but heavier and lacking the poll-spike. Both of these types are fitted with rather long handles, while the handle of the cooper's adz is only a few inches in length.

Old carpenters along the shore say that an expert adzmannow rare—could dress down a timber to such a smooth surface that it seemed to have been planed. Only an experienced hand could wield a razor-sharp "foot-adz" without occasionally cutting his toes. One apprentice, after recovering from a bad cut, came back on the job shuffling along with each foot in a keg. Or was the bayman telling me one?

The cooper's adz was used not only in barrel-making but sometimes for hollowing out canoes, large wooden bowls and even goose decoys.

In our illustrations the primitive stone adz is flat on one side, convex and grooved on the other—found in Monmouth County.





Adzes found in New Jersey

1. Carpenter's or cooper's; 2, 9. Bridge-builder's; 3. Railroad lipadz from Camden; 4. Ship-builder's lip-adz found in Waretown; 5. Ship-builder's gouge-adz from Waretown, with holly handle; 6, 7, 8, 13. Ship-builder's flat adzes; 10. Eighteenth century poll-less adz from England; 11. Cooper's flat-blade adz; 12. American Indian stone adz, New Jersey; 14. 19. Small adzes used by coopers, decoy makers, etc.

The ship carpenter's lip adz with rakish lines is from Raymond Johnson of Waretown.

That heavy, hand-forged tool used by the railroad man was found in Camden by Irving Cook, a blacksmith of Manahawkin. The wooden handle, disintegrating from the work of powder-post beetles, has been replaced with a similar one supplied by Donald Groff of Wading River.

Our examples of the cooper's adz came from up-state New Jersey.

The bridge builder used a flat-bladed adz with a square poll. similar to the carpenters' implement but heavier. The adz head found in the Sourlands looks to be of this type.

The shipwright's adz with peg poll and concave, or gouge, blade is one of the more uncommon forms. It comes from Irvie Camburn of Waretown and was used by his grandfather Joseph (1809-1903) who was a boat builder. The blade bears the impressed stamp "Watts 85 Av. D N-York."

In a discussion with Gene Holton, a ship carpenter of Dividing Creek, it was brought out that any old-time adzman or "dubber" was very particular about his favorite implement: it must be "hung" at just the proper angle, it was used for years by its owner and no one else. One is reminded of a violinist who would never permit another person to fiddle with his priceless instrument.

We are showing, too, a three and one-half pound poll-less adz head stamped "W. Mather." This crude-looking tool, almost resembling a grubbing-hoe, came from the cargo of a sailing vessel sunk in the Delaware sometime around the middle 1700's. However, adzes of sorts are said to have been in use many centuries ago.

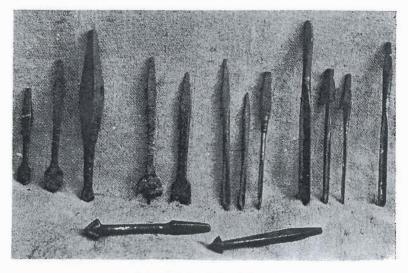
A Boring Subject

The bit-stock or bit-and-brace is an important tool in the hands of the woodworker and has been for centuries. Its evolution becomes clear when we look over a series of bit-stocks, compare the ancient with the modern and consider the various stages of development between.

This implement for boring small holes of no great depth in wood was preceded by the gimlet, or wimble, and its larger cousin, the auger. Each of these penetrating bits, with a simple crossbar at the upper end, must be regrasped after each half turn. The later and improved tool, you see, with its cranklike middle is capable of continuous turning without the alternating grasp and release of the workman's hands, besides which the bits are removable and various in types and sizes.

Although the "gimblet" is still handy for making small shallow holes and the auger is required for drilling big ones, the bit-and-brace combination was a tremendous invention. There are paintings and drawings done in the fifteenth century that show this revolutionary tool as being used then. Henry Mercer, in *Ancient Carpenters' Tools*, shows a photo-





Upper: Six bit-stocks or braces. Lower: Fourteen steel bits of seven types.

graph including three Dutch bit-stocks of the sixteenth century. They are of wood and not so different from European and probably American examples used in the seventeen hundreds. One of these turns up in some old shop or garret every now and then. We are showing two of them picked up in New Jersey.

Next in line in our photograph is an all-iron brace, blacksmith made, from Cream Ridge. This is followed at the right by two, factory made, in the 1850's. The most modern bitstock shown has a ratchet contrivance above the chuck. This one has the patent date 1880. The type is still in use.

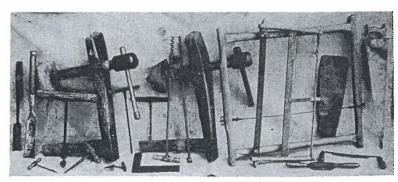
The other photograph shows old bits of various kinds, one of the "centre-bits" dating from the eighteenth century.

Vises and Tools

Vises with strong jaws to hold working materials have been, for centuries, important items of equipment in blacksmith shops and carpentry workrooms. An iron or steel vise fastened to the edge of a bench or on the top of a stout post is the sort used by a metal worker. A larger one made of wood and attached near the end of a long workbench is indispensable to the carpenter. Some are clumsily made, primitive things while others show great care and precision in their construction. The movable jaw of the woodworkers' vise extended from near the floor upward to the top edge of the bench and, in the earlier ones, was operated by means of a stout, threaded horizontal shaft or "worm" of hard wood. In fact the whole thing was of wood, even to the pegs holding various parts together. There were two such vises-now perhaps a hundred years old—in the Trenton shop of Cale Rogers who died some forty years ago. These were saved by Earle Dilatush when he tore down the old building. The long nearly vertical jaw of one is of oak, age-toned to a rich brown; the other has the closer grain of applewood and shows the curved outside-minus bark-along one edge. The surface of old wood, grasped or rubbed against hundreds of times, takes on a satiny smoothness of irresistible charm. Looking is not enough; one must feel it—thus unconsciously adding an infinitesimal gleam to that polished surface. There are smooth places of that sort on these old vises from the Rogers workshop.

Carpenter's tools were cherished and passed from one generation to another. Looking at the vises mentioned above, we can see, with the eye of early memories, the implements that went with them: crosscut, rip and keyhole saws, a set of wood block-planes ranging from little scratch-planes and smoothers through jackplanes and joiners to the lordly "long"





Upper: Francis Tilden Estlow at Wells' Mill with old fish gig found in the pond, vise and anvil of his ancestors.

Lower: A small group of old tools from carpenters' shops. The felloe saw has a hand-wrought iron thumb-screw at each end of the blade; the bow saw leaning against it came from Trenton and has a homemade frame; the spoke-shave, right foreground, is dated 1866.

Tom.'' There were bits and braces, assorted augers, a gimlet, scratch awl and brad awl, squares, T-squares and try-squares, draw shaves and spoke shaves, hammers, mallets, adzes, axes, chisels and gouges. There were bright, curly shavings and fragrant sawdust. For the most part the tools in the shop were, themselves, handmade and were polished and worn with years of use. A place of unfailing fascination, the old carpenter shop.

At Wells' Mills, a few miles into the Pines from Waretown, is a sturdy blacksmith's vise mounted on a post. Alongside it stands the anvil with a slender removable "beak." Both of these were used by the owner's great-great grandfather Godfrey Estlow at his place on Speedwell Stream a century and a half ago. Then for a couple of generations this old gear remained in the Estlow family at Martha's Furnace and from there in course of time it came to the present location. Francis R., the father of Francis Tilden Estlow, was an inventive man very handy with tools. He used that anvil and vise when making among other things, some five-tined fish-spears for use in the mill pond within, as one might say, spitting distance.

The Lure of Old Wood

No general discussion on antiquities could be written without frequent mention of wood in one form or another. Not only buildings, bridges, ships, boats and furniture were built largely of wood; icehouses of former days were insulated with sawdust, and wood pulp has long been used in the making of paper.

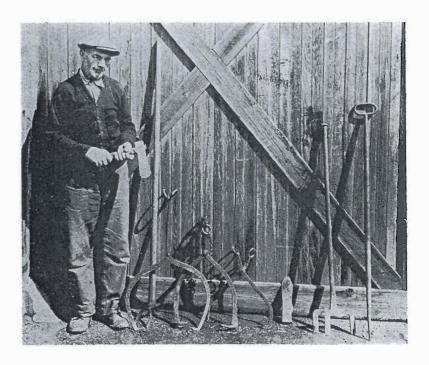
Many tools, implements and utensils to be operated by hand were made with the handles, at least, of wood. Its toughness, weight and springiness varying in different sorts, it is a poor conductor of heat or cold. So, for tools like axes and handsaws used often in winter, wooden handles are least uncomfortable while, on the other hand, flatirons for pressing cloth were often fitted with wooden hand-grips that would be cooler than if made of metal. Many more examples of specific suitability will come to mind.

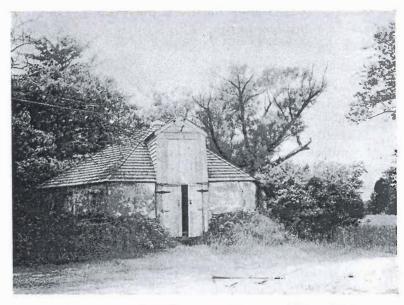
Our forefathers learned the special uses of the many trees native to New Jersey: white oak for ship timbers and the sills of barns and houses; black locust for fence-posts; chestnut or cedar for fence rails; white cedar for shingles, beanpoles and waterfowl decoys. Black walnut was used not only in furniture-making but for gunstocks and sometimes fireplace lintels. The tough, hard cross-grain of sour gum made that wood suitable for bottle-molds in glass factories as well as for mortars and pestles to be used in homes and apothecary shops. Maple and wild cherry trees furnished beautiful material for household furniture, while rolling pins and darning eggs of early dates were made of many kinds of wood. Pitch pine from The Barrens was employed in laying floors and for other uses where knotty boards were not objectionable. Ash came in handy for oars, shovel handles and wagon wheels; white oak for axe helves; hickory, apple and ironwood for small tool handles. A stick of laurel—chosen with an eye for the proper curve-made a satisfactory hog gambrel, while pegs made from the wood of an old blueberry bush were used for thole pins in rowboats. Long pegs, called trunnels (tree-nails), were used in the manner of dowel-pins for shipbuilding. These must be durable, hard and strong; so locust wood was considered the best for that purpose.

All the foregoing, it must be admitted, reads like something laboriously worried out by a schoolboy in the old essay-writing days. But an appreciation of the feel and satiny gloss of much-handled wooden objects is achieved only after years of—well, feeling! You have experienced the pleasant sensation of sliding your hand down a smooth stairway rail burnished by hundreds of hands before? Nothing else than old hand-polished wood could feel like that.

Icehouse and Equipment

Thirty years ago almost every farm had its own little icehouse and pond. Ten years later most of the houses were being filled in with empty bottles and tin cans, and the ponds were growing cattails and spatter dock. Now most of those little round, octagonal or square houses of brick or stone have disappeared completely, and many an ice-pond has been drained or filled in.





Upper: Leon Carty, of Fieldsboro, with some of his old ice tools.

Lower: The icehouse at Eno's, Forked River.

The homestead icehouse was picturesque—with its very steep, conical, shingled roof and narrow doorway. The floor was several feet below ground-level. I, personally, never did see one with ice in it, but there was still some sawdust that had been used for packing and insulation.

Then there were the larger houses and ponds of the professional ice dealers. And these had considerable equipment to go with them. Among such men there is Leon Carty on the old farm just below Fieldsboro (formerly "White Hill"). He started in the business there in 1888 and continued to get ice from the pond until about ten years ago.

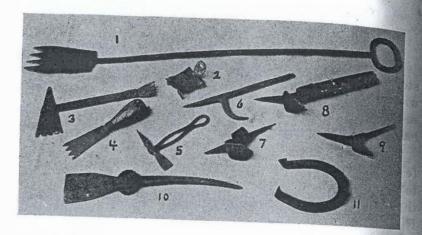
There was much equipment, including horse-drawn snow scoops and scrapers, but some of it has gone the way of junk and scrap iron.

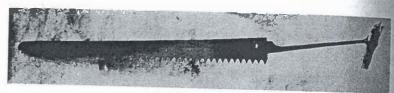
Several ice-saws that belonged with Carty's outfit have disappeared. The example we show is owned by Howard McAnney, a farmer and fisherman at Wading River. This is a large old one. Most of those kept by baymen are shorter and of later make. They are now used only for cutting loose the boats that are frozen in during the winter.

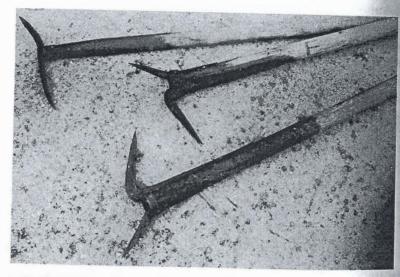
According to Bird Ridgeway of Surf City and Walter Martin of 'Hawkin, an icehouse was built near the bay at what is now 13th Street, Surf City. Long since demolished, it was put up by Charles Sexton who died about thirty years ago. It was a nine-sided building of Jersey pine logs and held one hundred and fifty tons of ice when filled to the top. When the ice had melted enough to leave a narrow space between it and the walls, salt-marsh hay was poked in all around for insulation.

Among the characteristic items of equipment used on iceponds are the special shoes worn by the horses that were used regularly on the frozen ponds. These shoes have three long, sharp calks—one in front and two in the rear. The ice shoes made many years ago by Gus Douster, of Atlantic Highlands, had rear calks that could be unscrewed for replacement when worn out.

Men who worked on the ice wore "creepers" to keep them right end up.







Top photograph: No. 1. Large ice-chipper from Frank Predmore, Waretown; 2. 4-toothed wrought iron "creeper" from Lop Ridgeway, Barnegat; 3. Thin iron chipper from Wm. Paul Budd, 'Hawkin; 4 & 5. Small iron chippers from junk shop near Hammonton; 6. Ice-hook from Waretown; 7. Sneak-boat hook from Forked River; 8, 9. Carter sneak-boat hooks, Barnegat; 10. Very old possible ice-axe dug up near mill pond at Willow Grove, N. J.; 11. Horseshoe for ice pond, made at Gardner Bird's Blacksmith Shop, Allentown, N. J.

Middle photograph: Early ice-saw from Howard McAnney, Wading River.

Bottom photograph—Three ice-hooks at Eno's, Forked River. Made by Elon Garthwright, former blacksmith in that town.

Old Skates

Very likely some of these old wooden skates were in use one hundred years B.S.H., but not for fancy or figure skating. Their long steel blades, curled up and over in front, were hardly suitable for cutting capers on the ice. They were called running skates and were intended for speed or, as in Holland, simply for getting a person quickly from one place to another.

From a number of sources we learn that in Europe the art of skating dates back many centuries. In Fitz-Stephen's Description of London, written in 1180, we find this paragraph:

"When the great fenne or moore (which watereth the walls of the citie on the North side) is frozen, many young men play on the yee . . . some tye bones to their feete and under their heeles, and shoving themselves with a little picked staffe do slide so swiftlie as a birde flyeth in the aire or an arrow out of a crossbow."

Primitive Norsemen are said to have strapped sharp-edged pieces of long animal bones to their feet, and the early development of skating was due largely to the Scandinavians and the Dutch. There seems to be no definite knowledge as to when



Seven of these skates have each a wooden sole-shaped part to attach to the shoe or boot by means of leather straps. They are probably of European make. The one with no curled slender projection in front was called a "rocky-dump" skate; this one was found in Gardner Bird's Blacksmith Shop, Allentown, N. J. The skate at extreme right is entirely of cast steel and was made in Philadelphia, Pa.

metal runners were invented, but it must have been very long ago. Some of our old wooden skates doubtless came from England, France and Holland, but probably many were made in America.

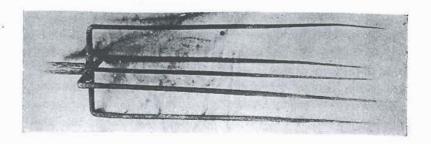
It is interesting to find that a few of these odd-looking things were being used as recently as the late 1890's. Joseph F. Bowen, of Princeton, told me that he learned to skate on a pair of them about fifty years ago. Said he, "When Horner's old clay pit froze over, that was a good place. The kids called those curled-up skates 'ismarockers,' but I don't know where the name came from."

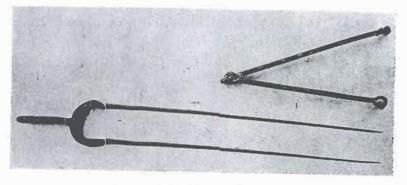
Well, as old things go, a half century is a rather short time. But surely some of these peculiar skates were in use a good hundred years Before Sonja Henie!

Small Animal Traps and Such

Either as pests or as a source of income, the small mammals of New Jersey have been important to man for more than one century. The implements and traps invented for catching them are varied and ingenious. Some would certainly be frowned upon by the S.P.C.A., but our revered forefathers were intent upon doing whatever they had to do in order to get along: certain niceties of civilized human conduct were brushed aside as being of little moment. In passing, it might be questioned if the world at large shows any great improvement in this regard.

An implement often used in the southern counties some years ago is the muskrat spear. Five or more slender, tapering steel tines nearly three feet long and very sharp-pointed were welded to a simple base of iron cross-pieces or thrust through a round 2-inch oak board about a foot in diameter. A short wooden shaft comes up from the center, or griphandles are fixed, one on each side. The spear could be thrust down through the top of a muskrat house, thus impaling several of the animals huddled together in the sleeping chamber. This method of spearing muskrats had to be done in rough weather—when the sounds of an approaching boat would not be noticed.





Upper: A five-tine muskrat spear. Lower: A choker and a two-tine spear.

The spear that we illustrate belonged to Albert Fogg, father of Luke Fogg of Canton, Cumberland County. According to Luke, it has not been used for sixty-five years.

John M. Pancoast of Hancock's Bridge, who worked the muskrat meadows for fifty years, showed me a similar spear but the tines are of unequal length. This would be an aid in penetrating a rat house more easily.

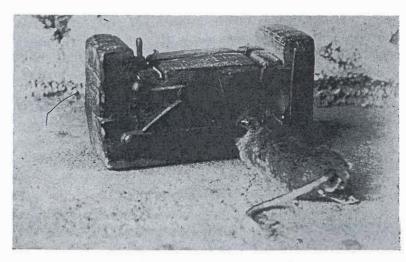
Another type is a two-tined spear obtained from Mid Toulson, a man of seventy-seven years located at Hook Bridge on Salem Creek. This one, he said, was made by George Lawrence, a Pennsville blacksmith who died thirty or forty years ago. The two slender tapering tines two inches apart extend down from an arched base that has a simple spike shank to go into the end of a wooden shaft. The spear was probably used as the muskrats emerged singly from their under-water exit holes when their house was jumped on.

According to Pancoast, snoods were used extensively in former times. The snood or "twitch-up" was a slipnoose of

fine brass wire set in a runway and attached to an upright spring-pole with a trigger arrangement. When entered and released by the rat the wire loop was jerked up leaving the animal dangling in the air.

An early kind of muskrat trap called the choker worked on somewhat the same principle, but this consisted of two stiff iron rods a foot long cleverly hooked together at one end to form a stout V that snapped shut when the victim went between. This trap, too, worked with a spring-pole and in such a way that the jaws or forks of the V closed together on the helpless animal.





Upper: A group of steel spring traps. Lower: A primitive spring mousetrap.

The choker was well known around Hancock's Bridge and Canton, but now there are very few examples left and none has been used for many years. The one shown here was given me by John Pancoast who said that it came from Samuel P. Simpkins of Hancock's Bridge. He, it seems, was using these simple blacksmith-made contraptions in about the 1860's.

Steel traps with toothed or serrated jaws are now very hard to find. The grandfathers of old men of the present day may have used them, though very likely they go back to the times of early powder horns and flint-lock guns, hoop skirts and horn-books.

Of later types—without teeth—are two rather large ones borrowed from "Budge" (Birdsall) Ridgeway of Barnegat. One with two springs is nineteen inches long and the single-spring trap is twelve and one-half inches. Each has stamped on the pan, "Victor May 28—07. Made in U.S.A. Oneida Community, N. Y."

A most interesting little thing is a two-way mousetrap found at an old homestead, "the Bradway House," built at Stowe Neck in 1700. It was discovered by the Luke S. Foggs of Canton who still prize it as an unusual primitive. This is a two-inch-long block of oak with an auger hole bored almost through each side near opposite ends. A small iron bar that snaps down across each hole, by means of a simple spring, is released by a trigger bait-pan at the back of each hole. Every part of the trap is handmade.

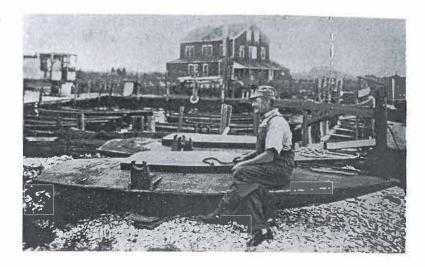
Counterfeit Presentments

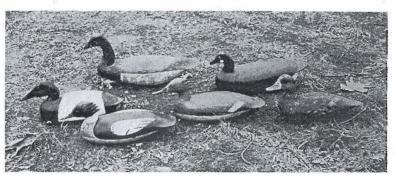
Barnegat Bay, with its fringes of salt marsh and subjacent strip of farm land, has been for generations the scene of great activity. Each year there are still remnants of the vast hoards of ducks and geese that blackened its surface before the strange disappearance of eel grass in the early 1930's. And there is Delaware Bay with its annual visit of all the Snow Geese in the world. The Delaware River and its inflowing creeks offer stopping places for thousands of migrating ducks.

Wooden decoys old or new, homemade or otherwise, are to be found in many a workshop or storehouse along the shore roads or on the river side of the state. In the fall they are hauled out, dusted off and touched up in preparation for the coming open season. Carefully hewn, whittled and filed down, they had been shaped and painted to represent many species. Some are crude and bungling; others, like those made by Jack Updike of Green Bank, show a knowledge of anatomy and careful attention to specific details. Their bodies are two pieces of selected swamp cedar, shaped, hollowed out and joined along the water line. Some old decoys that we find are of willow wood and very light. Peter Leap, at the bridge over Raccoon Creek just west of Swedesboro, came out with a primitive Black Duck stool. This, he said, was one of the first things he had to play with as a boy about sixty years back.

In former years there were, up and down "The Sound" on the Atlantic side of New Jersey, several accomplished decoy makers. Gideon Lippincott of Wading River and Lower Bank and Harry Shores of Tuckerton are said to have been among the best, but there were other good whittlers. Some of the older duck stools were shaped from solid blocks cut from white cedar butts; the later ones were hollow. Willow wood was used less often. One decoy, made forty or fifty years ago by Hen Grant of Barnegat, seems—by its various vanishing coats of paint—to have represented successively more than one kind of sea duck, now a Redhead and anon a Scaup. It is very well modeled, the head and neck as usual having been carved from a separate piece of wood and fastened to the body block.

From Tuckerton comes a pair of Red-breasted Mergansers or "Sheldrakes." Found recently in the attic by Everet J. Salmons, they were made by his father, Joel J. Salmons, about a half century ago. Though the crests on their heads have four points instead of two, the placing of the nostrils near the base of the bill is distinctive of this species, while in the riverhaunting American Merganser they are midway between the tip and the base. Here the craftsman showed a bit of close observation.





Upper: Oscar ("Wiler") Eayre of Barnegat, with two of his sneakboats of the type that originated locally several generations ago. Howard Perrine ("Hop"), Andy Kilpatric and others still build them.

Lower: Top row: A Brant made years ago in Barnegat; a Black Brant by Charles Black of Bordentown.
 Foreground: Canvasback by Black; a pair of Mergansers ("sheldrakes") by Joel J. Salmons, formerly of Tuckerton; a solid wood female broad-bill probably by Jesse Birdsall.

Brad Salmons of Staffordville, who died in 1927, made even more duck stools. and he spent much time in studying the forms and attitudes of different ducks in the bay.

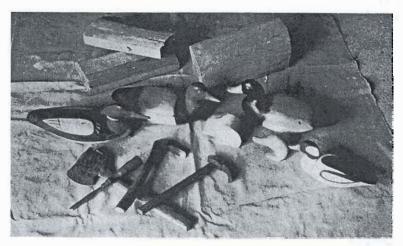
The male Canvasback and Black Brant were built by Charles Black of Bordentown about fifteen years ago. The Canvasback is particularly well done. Both are fitted with glass eyes such as taxidermists use for mounted birds.

Three crudely-made Black Ducks—two of them are excessively black, and one looks like a tugboat!—are "pick-ups" that had drifted loose and were found along the Delaware twenty-five years ago by Horace ('asperson of Elsinboro. They are clearly homemaders, but who are we—to scoff at suchearnest efforts?

Any old bird-stuffer could tell you that a bird of the heron family smells to heaven, yet a few decades ago Great Blue Herons were shot for food. Maybe thorough parboiling should be followed by the removal of all heron and the addition of pungent pot herbs and vegetables: the result might be a fairly succulent stew. . . Anyhow, decoys were made—usually flat silhouettes cut from boards. We have one of the more rare ones carved in the round, apparently from willow wood. This smooth effigy of a Great Blue was given to Will Reid of Waretown in 1919 by Bill Horner, a Parkertown clammer then in his eighties. It dates back to the early part of Horner's life, but as for who built it and when—those facts fail to emerge from the past.

Here is a hamper of small birds—all solid wood carefully rounded. "Snipe stools" they are called, but these images were intended to represent small sandpipers, yellowlegs, Knots and Black-bellied Plover—or in bay language, Peeps, Yelpers, Robin Snipe and Bullhead. There were several old goose, brant and duck decoys in Watson Penn's workshop at Forked River, but the littler fellows seemed more interesting. Many fine shot holes prove they fooled their living counterparts and indicate that the gunner was not above taking a pot shot at birds on the ground. Such little stools, each stuck up on a slender stick in lieu of legs, were put out in the short stubble of a meadow after the salt hay had been taken off. According to Wats Penn these particular ones are the handiwork of Sam Anderson, a local man who died some fifty vears ago. The oak splint basket in which they were carried by the gunner was made by Penn. Two rather more realistically painted Yelpers were built by Oscar Eayre of Barnegat about fifty years back, and Oscar is an ornithologist of long experience in the field.





Upper: A group of "snipe stools" by various old-time whittlers along the Bay from Forked River to Manahawkin; a very old Great Blue Heron decoy that was given to Bill Reid; a Canada goose in the round, by Jesse Birdsall, a former bayman of Barnegat; a Canada goose silhouette by Edmund Ridgeway, late of Barnegat.

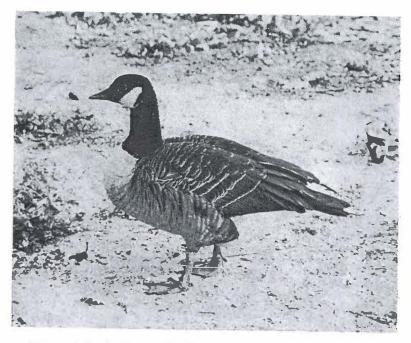
Lower: Red-breasted Merganser and Redhead by "Hen" Grant; a Scaup ("broad-bill") and Bufflehead by Stanley Grant. In foreground, tools formerly used by Henry, and later, with the white cedar parts shown, by his son Stanley.

The "snipe stools"—perhaps to their makers they conjured up memories of tasty tidbits served on toast or maybe money from a New York market. To me, in some perverse kind of way, these grotesque little misrepresentations of streamlined plover and peep bring back the length and the breadth and the sweep of the meadows that border the bay called Barnegat.

A Bayshore Lady

In times past there were certain individual Canada geese and wild ducks partly domesticated and trained to serve as decoys. During the wild fowl season they were taken out on river or bay for the purpose of enticing their shy relatives within gunshot distance. There are some such birds, now middle-aged or elderly, to be seen in certain dooryards today.

Here is a recent photograph of "Nanny," a buxom and upstanding bird still in her prime so far as appearance goes and the daily companion of Watson Penn of Forked River.



"Nanny," the forty-year-old Canada goose formerly used as a decoy bird. She still honks in the dooryard of Mr. and Mrs. Watson Penn in Forked River.

When asked about her age Wats replied, "She's forty years old." Nan glanced up with a quizzical brown eye and said nothing. She would make it thirty at the outside. If we know our women.

Catching Clams

There is much to be said for and about the baymen and baywomen of New Jersey. First—but not least—they have that saving grace, an enjoyable and waggish sense of humor.

Now look at the clamming industry. There are diverse methods of taking these important shellfish from the sandand-mud bottoms of our bays. One clammer will use tongs only; a second favors the clam rake, a rather heavy, manytoothed implement jerked along gently through the bottom under two or three fathoms of water; a third uses the scratch rake, a short-handled thing like a stout garden rake and operated in shoal water. Another goes around sight-hunting for individual clams exposed by shifting currents and tides; he employs the small pick-up or take-up rake. Around Sandy Hook Bay where this is most often used it's called the cat'spaw, while down Jersey they call it the eagle-claw. Other men row out on the ebbing tide and "go overboard"; then they dance around bare-footed in water up to the waist and "tread" the clams out of the mud. When a clam is found it is cleverly slid up the other leg, within reach without ducking, and popped into a bag slung over the shoulder. Those bayfolk who go in for clamming in a big way use the dredge (pronounce it "drudge"!), an oversize rake slung outboard from sloops and small schooners in the Sandy Hook area.

The point is this: whatever the method used, it is called "catching clams"—as though the little chaps went scooting around like Jack Rabbits and must be pursued with nimble foot! With this in mind we suggest that the New Jersey clammer might well be called the Clam Hound.

As for our bivalve mollusks themselves: there are three well-known useful species, not including the oyster.

The big surf clam, or skimmer (Mactra solidissima, Chemn.), lies bedded down in great colonies off shore and

is sometimes washed up on the outside beach in big piles and windrows. This one is used only as bait and in the makin's of excellent "flitters" (as I was told by an old-timer in Atlantic City).

The soft-shell clam, or nanny-nose (Mya arenaria, Linn.), and often known by another name, lives in colonies in the sandy mud of the bare tidal flats. Each of these oblong, thin-shelled animals stands on end a few inches down in a vertical burrow. They are dug at low tide by means of a flat-tined potato drag. There is nothing to compare with the "P.C." for steaming.

The quahog, or hardshell clam, is deservedly the most famous of all. This is *Venus mercinaria*, so named by Linnaeus who, to judge from his whimsical sense of humor, *must* have been a Jersey bayman. The quahog, being rather sedentary and quiet in behavior, might inspire a useful saying: "As ca'm as a clam in Barnegat Bay."

On February 21st of last year, the ice having gone from the bay, there were large heaps of clams in the dockhouse of the Cottrells at Waretown. A half dozen men were sorting and bagging with great bustle and activity. The designated sizes were these:

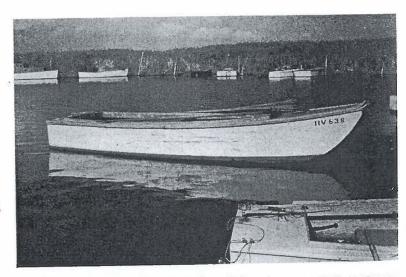
> Littlenecks, 1500 to the bag Cherries, 1000 to the bag Mediums or "8s", 800 to the bag Regulars, 500 to the bag "Chowders", 300-400 to the bag

Apparently these names have been used for many years. One clam bag contains two bushels.

We know that the natives were making a practice of gathering shellfish long before the white man arrived on these shores. At various places along the Sound there are still recognizable dump-heaps, or kitchen middens, composed mostly of clam shells. Several years ago Sam and Warren Jillson called my attention to such a pile in the Tuckerton meadows. This one, about eighty feet long and ten feet high, supports the bare skeletons of old red cedars that grew on



Andy Brown with cart for peddling clams and fish at Barnegat.



Bill Reid's garvey with two pairs of clam tongs on deck, anchored opposite Cottrell's clam house, Waretown.

it. The dump must represent the accumulations of many seasons' work. The ancient burial ground on the "fastland" a few hundred yards away yielded many skeletons and relics two or three decades ago.

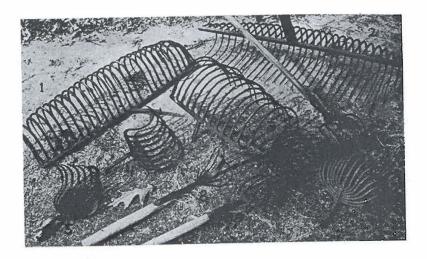
Weathering and frequent immersions in salt water cause neglected iron equipment to rust and become pitted rather rapidly. Something left out in the wet, or even in a damp building, for a year or two may look to be very old. Probably most of the old tongs, rakes and spears that we find now were forged by blacksmiths within the past fifty or seventy-five years. Iron and steel tackle known to be a hundred or more years old will have been taken care of more faithfully than is usual along the Sound.

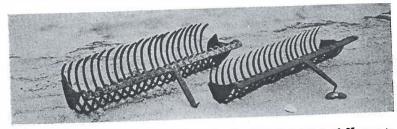
Now for a look at these implements used for catching clams.

Early historians mention the use of tongs in the seventeenth century, but some form of these and clam rakes were probably made long before that.

Tongs are somewhat like two long-handled garden rakes fastened together, facing each other, by a pin through the wooden handles two feet or more back from the iron head or bar that the teeth are on. The slender, pine handles or stales cross each other where held by the pin so that the toothed jaws open and close. In operation the tongs are put straight down over the side of the garvey or batteau, opened, jabbed into the bottom of the bay, closed together and brought up hand over hand. The contents are then dumped into the bottom of the boat or on the narrow deck along the sides of the garvey. Some skill and endurance are needed to continue this work for any considerable time.

Oyster tongs are similar but the head or bar is of white oak instead of iron and each bar has eighteen teeth, while that of clam tongs has sixteen. These statements, as offered by Charles Johnson at the sorting house of Fred Sprague on West Creek, apply to modern tongs; some old ones from Leeds Point have only ten teeth. These tongs, however, are so heavy that they are more like "clam gougers"—built for rough usage on a hard-packed bottom.





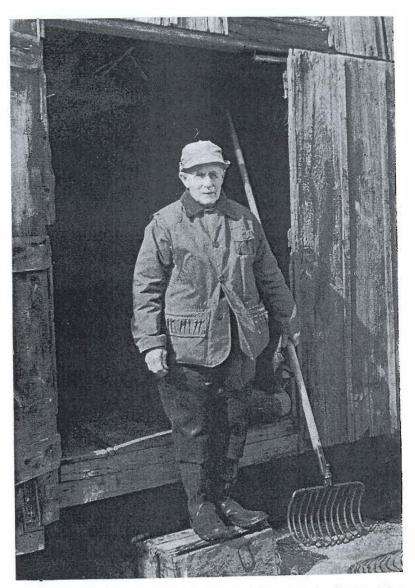
Clam and oyster rakes. 1. Clam rake by George Porter of Keyport. The late Al Robbins of Barnegat designed this type. 2. Clam dredge-rake from Belford; 3. Oyster rake by Horace Erickson of Barnegat; 4. Oyster pick-up by same; 5, 6 & 7. Eagle claw or cat's paw pick-ups used in sight-hunting for single oysters and clams. These were made at Sag Harbor, L. I., about fifty years ago. 8. An eagle claw made from a winter eel spear; same type from an old pitchfork; 10. Pick-up made by Joel Haywood, former West Creek blacksmith and toothpuller, and used by George W. Sprague, grandfather of Fred Sprague, West Creek, Ocean Co.

Bottom: Two Shinnecock clam rakes from Long Isand. A type much used formerly in Barnegat Bay. These examples are from Jarvis Pittman and Evans Miller of Barnegat. The rake at left has the original down bend at tip of shank.

The metal parts of many tongs used in Great Bay were made by Bob Webster of Tuckerton, the only remaining blacksmith there. The baymen usually do their own woodwork.

The rake is a heavy thing, with twenty to thirty long steel teeth curved down in semicircles. The iron bar to which they are welded has a short shank extending back from the centre. This attaches it to the end of the round pine shaft by means of an iron ring. The shaft, which varies from ten to twentyfive feet in length, has a short crossbar at the other end for gripping with both hands. In use, the rake is dragged through the sand of the bottom back of the small boat, thereby raking out the clams while the boat drifts slowly forward with the tide. The general principle is the same, but several types with varying details have been built by many blacksmiths along the Atlantic coast. There are very few of the old Shinnecock rakes now remaining. This kind was made near the upper end of Long Island. It is distinctive in having a thin, flat, iron "wing" at each end to keep the clams from spilling out. The teeth are all the same length. After a considerable search we located two of these rakes in Barnegat. one owned by Evans Miller and the other, slightly larger, by Jarvis Pittman.

The character of the bay bottom varies in different places. A stout rake with teeth so set that they penetrate shallowly is used for a hard-packed bottom. For something of a softer, muddier consistency, the clammer can use a rake with long, slender, less-curved teeth that will go deeper without halting the drift of the boat. Of that sort is the type built by Horace Erickson, a Barnegat blacksmith who died about thirty-five years ago. Some of his rakes, well preserved, are still in use, especially those with only ten or twelve teeth. A peculiarity is that each outside tooth is a prolongation of the bar to which the others are welded. Such examples are still owned by Howard Perrine, "Wyler" Eayre, "Lop" Ridgeway and others around Barnegat.



Harry ("Lop") Ridgeway, at his old Barnegat bay-house with Erickson type pick-up rake.

The make most generally in demand, however, is the type designed some years ago by the late Al Robbins of Barnegat. The first ones were built by George Porter of Keyport. Norris Parker of Parkertown did some effective "promoting," and now the Keyport rake is built annually in considerable numbers at the Porter forge. When in constant use one of these rakes—costing fifteen to twenty-four dollars—wears out in about one season. Years ago George Porter, Sr., worked in the blacksmith shop of Tilton and Cherry at Keyport. The rakes they made are stamped T. & C. The Porter rake has a small, curved, flattened, single or double "thumb" at each end to prevent the spilling of clams.

Many other blacksmiths have made large clam rakes, and among them is Gus Douster, the oldest smith in Atlantic Highlands.

The scratch rake with straight head or bar is the sort commonly employed by inlanders who go over to the bay for a day to catch a mess of clams.

The eagle claw is perhaps the most picturesque implement of all: a small, rounded group of six to thirteen curved teeth all springing from the end of a hollow shank, as in an eel spear. A primitive one with welded teeth was used by George W. Sprague, the grandfather of Fred of West Creek. It was probably made by Joel Haywood, an old-time blacksmith and tooth-puller of Tuckerton. Another was made from a pitchfork, and one that we have is a winter eel spear with the tines bent into curves. The most regular and sturdy cat's paw rakes were made at Sag Harbor, Long Island, where many eel spears of good steel were produced.

Many farmers in the bay country are part-time clammers. Counting the results of their efforts along with those of the professional shellfishermen, the gross tonnage of clams caught annually in New Jersey would be almost beyond belief.

Among the many landings and docks along the Sound, Oyster Creek and Leed's Point are good places to see the baymen at their work. Here, for instance, Larry and Casper Strickland—eighty-two and seventy-eight years young—come up the creek with their day's quota of quahogs. Here you

may enjoy the bay breeze and the misty beauty of Sea Lavender blooming in the autumn meadows. Or you can savor the full bouquet of clam and oystershells—not too recently emptied. From among the reeds a marsh hen opens fire with a burst of chuckles; but that's just her way. A few blackheaded gulls fly over splitting their sides with laughter. But they are Laughing Gulls and mean nothing by it. The general atmosphere, though perhaps insinuating, is really wholesome and friendly.

Oysters-and Mussels

"Oysters are here reckoned very wholesome; some people assured us that they had not felt the least inconvenience after eating a considerable quantity of them." Thus wrote Peter Kalm in 1748.

Going back from nearly a half century ago, for a hundred years or more oysters were very important among the natural resources of New Jersey. In the United States government report of 1881, Ernest Ingersoll says oyster work supported 400 families in Keyport and vicinity; in Perth Amboy, 75 families; while Tuckerton, West Creek and Manahawkin oysters furnished livelihood for more than 400 families. Now this kind of work has completely vanished from Raritan Bay, and oysters have become rare in all the bays down our Atlantic border. However, there are shucking houses still in operation at Bivalve and a few other places along Delaware Bay.

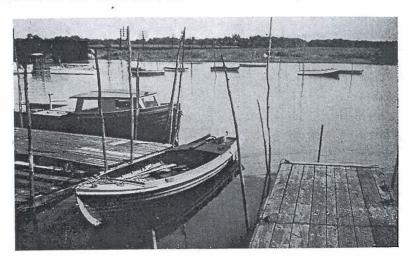
At the present time the shells of our oysters are three to five inches in length, but in 1680 Jasper Dankers and Peter Slyter wrote of seeing some a foot long. Old shells of six inches or more are still raked up occasionally in Barnegat Bay.

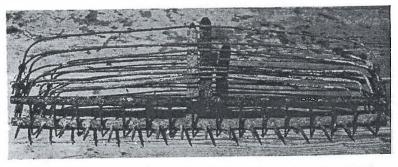
No adequate history of the oyster industry as a whole could be compressed into a few paragraphs, so our concern here will be mostly with the tools used in the business. It is said by early writers that the Indians along our shores had crude rakes to use in the shoal waters. Certain it is that they left huge piles of shells in the salt meadows, and such are still to be seen as bush-grown elevations between Forked River and New Gretna. White men were probably using tongs and rakes shortly after they settled along the coast. In writings of 1814-1815 we find mention of dredges, rakes and tongs for "catching up oysters." Having been made mostly of steel, iron and wood, the really ancient implements have no doubt long since corroded away. We may find, now and then, a well-cared-for pair of iron-headed tongs made well over half a century ago. Useful pick-up rakes of ten or twelve teeth, almost as old, were made by Horace Erickson in Barnegat. A few of these—and later copies of them—are still valued and used by old-timers who "follow the Bay."

The head or crossbar of each jaw to a pair of oyster tongs is of iron or white oak, but the sharp teeth, a couple of inches long, are of steel and set one and three-quarters inches apart in the bar. Charles Johnson, when discussing equipment in his clam house on West Creek, pointed out that clam tongs have sixteen teeth in each bar while oyster tongs have eighteen, the bars being about thirty-five inches long. Above each bar of any tongs are several "bows"-slender rods often of brass—to keep the clams or oysters from spilling out. The two handles or stales are straight, somewhat flattened poles of straight-grained long-leaf pine from the Carolinas. They are from ten to thirty-five feet long and pinned together to open and close like a pair of scissors. In oyster tongs the pin is thirty-two inches or more above the heads, rather higher than in clam tongs. The pair of tongs shown in our photograph are heavy—"man-killers," says Woody Horner of Tuckerton. They were used for catching oysters sixty or more years ago.

Any tongs would seem like man-killers to anyone but a toughened bayman. They are thrust down, with jaws open, over the side of batteau or garvey, and jabbed into baybottom repeatedly, or until they are felt to contain enough to bring up and dump into the boat. When clusters of oysters are caught up they are gently knocked or pried apart with a small hammerlike tool called a culling iron. Some of these are here illustrated.

Then, after being brought ashore, the oysters are opened or "shucked" by means of tools peculiar to that purpose. In times past when the professional opener shucked a required 3,500 oysters per day, he worked at a bench in the top of which was a hole at his right hand, while at the left stood a block of wood with a short chisel-like piece of steel or iron set in its top. Beyond this breaking block stood a bucket. An oyster, in the left hand, was held with its lip or "bill" over





Top: Keyport skiff owned by Eddie Bloodgood of Morgan on Raritan Bay.

2nd: Oyster tong heads sixty years old. From "Woody" Horner of Tuckerton.

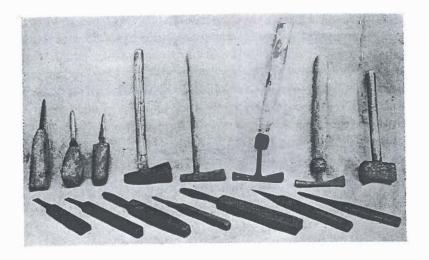
the edge of the iron. Then a sharp blow with a breaking hammer, held with the knife in the right hand, broke off a bit of the shell at the bill or growing edge. The hammer was dropped on the bench beneath, the knife blade inserted into the break. A quick twist cut the "eye" or muscle, the top shell was opened, the oyster flipped into the bucket and the shells dropped through the hole into the basket below. The hammer was picked up again, another oyster grasped and the whole operation rapidly repeated. Some shuckers eliminated the hammer, cracking off the lip by a blow with the heavy all-steel knife only. Others preferred the "stabber"—a short, thin, steel blade set in a short, plump wooden handle. The stabber is thrust in along a side margin to cut that strong adductor muscle.

The above information was given by shuckers now employed at Bivalve and by Oscar ("Jim") Ridgeway of Waretown who, thirty or forty years ago, was a shucker in Jersey City. A seven-pound lignum vitae block used by him is worn down to the depth of an inch at each side of the breaking-iron on the top.

Inquiries at the Keyport creeks, that once were humming with oyster business, brought forth many items about the old days. At the tavern on Matawan Creek, Roy and Kitty Matthews remember an old cracking-block that was cone-shaped and very shiny. And very shiny is an example hunted up by Charles W. Evans, now in a former oyster house on the little creek nearer town. This polished piece of lignum vitae shows few knife scars, though it was first used at Rockaway, Long Island, sixty years ago.

A beveled block of Carolina pine with set-in cracking-iron is much scarred near one end. It was found in Red Bank, Monmouth County. A smaller one of oak with a cracking-iron sticking up from one side is an oyster block made a few years ago by William Gray of Waretown.

The all-steel knives range from seven to nine inches long. The smallest, lightest one, made by George Bishop, former blacksmith of Tuckerton, is from Ed. Driscoll of that town. In this the flattish handle and thin blade are about equal in





3rd: Top row from left: 1. Oyster stabber from Oscar ("Jim") Ridgeway, Waretown; 2. Stabber from Bivalve; 3. Stabber used many years ago by Tom Birdsall of Barnegat; 4. Heavy "culling iron" from shop of Schealer Ridgeway of Barnegat; 5. Culling iron from Oscar Eayre of Barnegat: by Erickson; 6 & 7. Two light culling irons from George G. Kelly of West Creek. These were made by George Bishop, a former Tuckerton blacksmith. 8. A breaking hammer from Bivalve on Delaware Bay. Foreground: Seven all-steel, hand-forged oyster knives from several old oyster docks in New Jersey.

4th: Left: Oak oyster block by Billy Gray of Waretown; 2. Lignum vitae block from Charles Evans of Keyport; 3. Much used lignum vitae block from Oscar Ridgeway of Waretown; 4. A knifescarred Carolina pine block. Red Bank. Foreground: Oyster shells from Barnegat Bay.

length. Of the other four here shown, the blades are shorter in proportion. The larger, square-handled example—"Philadelphia type"—was found in Mauricetown, Cumberland County, while the lighter one comes from the bayhouse of George Kelley at West Creek. The heaviest knife in the lot was found in Red Bank, Monmouth County. The specimen with tapering, pointed blade was made from a thick rectangular file. It came from "Jim" Ridgeway of Waretown.

The oyster stabber, with the egg-shaped wooden handle grooved by contact with a breaking-iron held in the same hand, came from a shucker at Bivalve. The one with worn, tapering blade was used by Tom Birdsall fifty or more years ago at Barnegat. According to his son-in-law, Dick Grant, Tom always removed the blade from the egg-shaped handle of a commercial stabber and put it into a handle of his own make.

The great piles of oyster shells that once rose along the sides of Matawan Creek have disappeared completely. The oyster skiff or "skift", a low but not lowly craft that once must have swarmed in the waters at Keyport, is now all but extinct. We know of a lone survivor built fifty-seven years ago and still kept in good shape by its owner, "Eddie" Bloodgood, of Morgan. We took a photograph of "Esther" tied up at her dock in Cheesequake Creek. She now has "the New Look:"—a motor was installed some while back—but otherwise her appearance is as it was in the beginning and, we almost hope, ever shall be.

Curiously enough, the Keyport skiffs were built in Prince's Bay, Staten Island, by Steve Bartine who originated this type of boat. The garvey and the sneak boat are old inventions native to Barnegat Bay. However, while there are new broods of these every year, the Keyport skiff seems to belong in a closed series, its inventor and maker having died about thirty-five years ago. So, for the record, it may be well to give rather detailed specifications as furnished by Capt. George Wagner, of Waretown, who was in the oyster business all along the coastal waters and knew Steve Bartine very well.

This kind of skiff is a three-man, flat-bottomed rowboat with out-curving sides. It has a short deck, the bow-sheet, in the sharp prow and another flat deck—the stern-sheet and false stern-sheet-covering more than four feet of the square-cut stern. The false stern-sheet can be slid forward to serve as a seat for the aft oarsman. There are two seats forward for the other two men. This leaves a long open mid-section for the load. The row-locks are of oak and removable to be out of the way for the tongs. A thin sealing or false bottom of spruce comprises the floor, which covers the timbers or ribs of the boat. The bottom is of two-inch long-leaf pine; the strakes (or side boarding) are white cedar, while the stern and stern posts and timbers are of white oak. Lewis Roach, a colored man who worked for Bartine, cut out the timbers in such a way that the large roots buttressing the trunk of a white oak tree gave the desired curves for the sides of the boat. The boards of the stern are of one and one-half inch oak, set flush and doweled together, as are the bottom pine planks, with galvanized iron rods.

Such a skiff is twenty-four feet long over-all and will carry fifty bushels of oysters. It can be handled by one man, Ed Bloodgood often having rowed the "Esther" to South Amboy and back. Skiffs were handy boats to tong from and for odd jobs in the creeks and bay. According to Wagner, Bartine's price per skiff ranged from \$70 to \$110.

Of course, in oystering, tow-barges were used for heavy loads, while dredging and other heavy work were done with sloops. There are still many sloops and barges to be seen in some ports, but "Keyport skifts" are far and few.

Some people enthuse over blue points on the half-shell, others have gone lyric on the subject of "Fortesque Fries;" but I would sing a song of the mussel—a strangely neglected mollusk of channel and bay. Of thin, glossy black shells, the animal within is plump, tender and tasty.

For centuries the edible mussel (Mytilus edulis, Linn.) has been cultivated and gathered for food in Europe; in America it was used to some extent by Indians and the colonists. But now only our discerning citizens of Italian origin take the

mussel seriously. It is a common bivalve occurring in great beds often concealed under the yellow-green growth of sea cabbage in the shoal waters of our Atlantic bays. The shell-fish man requires only a scratch rake or catspaw to drag up quantities of mussels, but some time and work are needed in separating them into conveniently small clusters, for they cling together in clumps and long strings by means of the byssus—a tuft of strong, fine, hairlike filaments growing from the lower edge of each animal. And they don't "keep" as long as clams do.

Whether simply steamed or prepared Italian style, mussels are delicious morsels; mildly spiced and "pickled down," they are something to talk about. But those people who have never tried *jellied* mussels have still a bit of serious eating to look forward to. The mussel, I maintain, rates high on the list of sea foods.

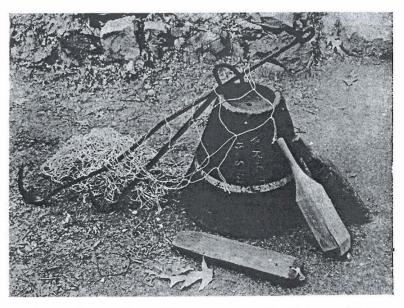
Sturgeon Fishing

The sturgeon is one of the types of animal life that roamed the earth or the waters thereof millions of years ago. The cockroach, the king crab and the opossum are holding their own, but the biggest fish of our large streams and fresh water bays has not been faring so well; unrestricted netting and the pollution of river waters have been against it.

Fifty years ago there were plenty of large sturgeon in the Delaware and lower Raritan. Our older citizens remember seeing a half dozen or more hung up on trees or poles at various places along the river banks. Apparently they were not much valued as food, for a six-foot sturgeon could be bought sometimes for twenty-five cents. In later years one of similar size might bring two hundred dollars.

Discussions with half a dozen old fishermen along the Delaware River, at various places between Trenton and the Salem vicinity, brought out many interesting facts about sturgeon fishing. When these hardy river men are gone, there will be no one with first-hand knowledge of the methods used. Even now, examples of the old equipment are not easy to find.

The nets, made of one-eighth inch cord, varied in length and depth according to the width and depth of the river where used. They were "drift nets"—not anchored anywhere—and moved up and down the river according to the tide. The meshes (pronounced mashes) were six to eight inches square. According to "Gus" Black of Bordentown, the nets used there were one hundred twenty-five yards long and eighteen feet wide. They were held upright in the



Old equipment for catching sturgeon in the Delaware River.

water by means of white cedar or cork floats attached at fifteen-foot intervals above the upper edge of the net by short lengths of stout cord. Thus the weight of the net kept the bottom line (without leads) near the river bed, while the top line was four feet below the surface of the water. The cedar floats, or "dobs," were 18-inch pieces of 3 by 4's more or less tapered at the ends. Those of slender type were called "picket dobs." The dobs stood upright, six or eight inches showing above water.

Down Salem way, where the river is wider, a net up to two hundred twenty-five fathom long and thirty-five feet wide was used by Horace Casperson of Elsinboro, Bill Harris of Salem and Billy Baker of Hancock's Bridge. All these old rivermen furnished many details of information.

The submerged net extended across the river and drifted free, so the fishermen had to keep track of its location day and night. To make this possible a floating buoy was attached to each end of the float line. This buoy was made, like a keg, of oak staves held together with iron hoops. The sides are straight but sloping from a broad base to a smaller top. During the day a flag waved from each buoy; for the night, a lantern was fastened to the flat top.

The men watched from a small sailboat, and when some of the dobs on the float-line were seen jerking under, they hurried out in a rowboat and hauled up that part of the net. If a sturgeon was entangled in it the middle seats were taken out, the big fish—net and all—was either caught with a loop of rope or snagged with a strong iron gaff hook and pulled in. As soon as it was in the bottom of the boat the seats were put back over it and sat on to hold the fish down while the net was cut away. A powerful, 200-pound sturgeon required a good bit of holding down.

According to Eugene Stanton of Bridgeport, a sturgeon was sometimes hung up in a tree and left till the heat of the sun brought the oil out. This was caught in a firkin placed on the ground beneath. It was good for oiling harness or to use as a fly repellent on animals.

Already most of the simple tackle for catching sturgeon has disappeared, but we occasionally see one of the large gaff hooks in some junk shop; the cedar dobs turn up once in a while and their use speculated upon. George Wright, a few miles below Bridgeport, had the only buoy we have seen. This was used several decades ago by his father, O. B. Wright, and has the lettering, "Wright. B-side" cut in the staves. "Cappy" Casperson, at Sinickson's Landing near Salem, uses a section of an old sturgeon net every summer. "It makes the best trellis in the world for lima bean vines," said he.

The old-timers along the Delaware are fine chaps to know, and one's chief regret is for not seeing them more often.

Eels

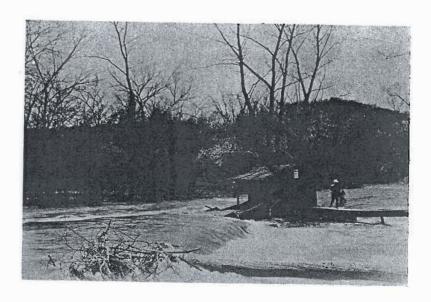
From remote ages eels have figured as an important item of food in many parts of the world. Probably the first ones prepared over a fire had a definitely smoky flavor, and today smoked eels from the vicinity of Sandy Hook are, in themselves, good enough to lend fame to that neighborhood. There are little smokehouses all along the highway from Keyport to Atlantic Highlands where you can stand at a counter and enjoy a luncheon of eels and crackers.

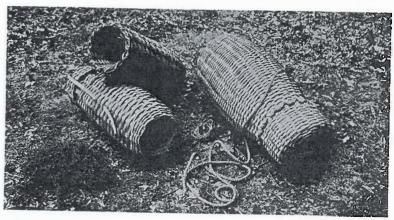
The method of preparing these attenuated fish is at once particular and simple. They are first cleaned, thoroughly washed, soaked in brine for several hours, then washed and wiped off. They are now ready to be hung on racks in the smoke-house and smoked for twenty-four hours over a smudge of oak or applewood.

But first catch your eel! Since for centuries this has been considered a food fish in good standing, man's ingenuity has evolved many methods of capturing it. There are spears, dredges, weirs, fykes, pots and bobs, each type of equipment and technique so distinct as to merit special notice.

Probably some sort of weir was used in quite early times. In this, two low rock walls converge downstream to form a nearly submerged V at the apex of which a short, narrow ramp or swimway leads the fish into a catch-basket below. Usually a small shanty is built over this point of the weir. Little narrow shacks of this kind are to be seen perching midstream in several small rivers of our northern counties. For example, they add a picturesque touch to certain stretches along the Pequest.

The general idea of the fyke, as used in the lower Delaware, is somewhat similar. The long spreading V of smallmesh net ends in a tubular bag of net held open with wooden hoops. In the entrance of this a funnel points back toward the bait—often a small bundle of poultry scraps.





Upper: Eel weir in the Pequest at Buttsville.

Lower: Two oak splint "eel pots" and a "live-car."

Upper trap made by Watson Penn of Forked River.

Lower trap and eel car by George Marshall of Tuckerton.

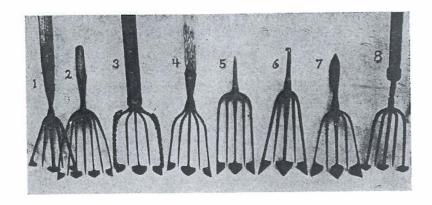
Lower left corner: Piece of eel fyke net from Peter Leap of Swedeshoro.

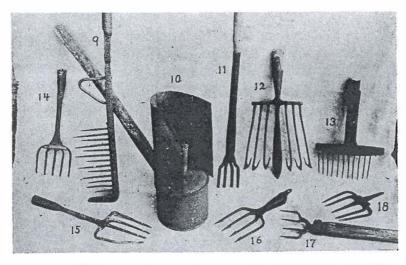
Eel pots, each nearly a yard long and five or six inches square, are made of strong wire screen. Eeling is not what it used to be, but stacks of these wire "pots" can be seen stored in many fishermen's bay houses. The old style pots are slightly tapering cylinders of woven white oak splints. The type formerly made by the late George Marshall of Tuckerton has the usual funnel entrance and a splint cap fitted over the back end. The old trap from Wats Penn of Forked River is similar but was fitted with a plug of green pine instead of having a woven lid.

George Marshall's "eel car"—to keep 'em alive in—is like the pot but larger, closed at one end and capped at the other. When filled it was tied or anchored in shallow water near the boat landing. There is very little of the old splint equipment now to be found along the bay shore, but "Daddy" Horner, the basket maker of 'Hawkin, still weaves an eel pot occasionally—just "to keep his hand in," perhaps.

Bobbing for eels is, it seems, a method of capture more often practiced along the Delaware and its tributaries. As described, it is merely a matter of dangling in the stream a small mass of earthworms or other delectable bait by means of a short line at the end of a stout rod. A cork or wood bobber attached to the line above the bait will float on the surface and become visibly agitated on appropriate occasions. Then a luckless eel can be jerked out of water.

According to information received, the dredge or drag is illegal. When one is discovered in a bay house it almost invariably belonged to someone else and just somehow got left there. Though somewhat variable, it is a stout iron bar with a dozen or more pointed four-inch teeth set in one side, and at right angles to it, near one end. Just above the teeth is a loop for the attachment of a rope. When in operation the shaft is held vertically over the side of the boat; its lower end with teeth pointing forward is pushed into the mud bottom of the bay. The rope leading to near the boat's bow holds the shaft in vertical position when under way. Any eels bedded down in the course of the dredge will be impaled on





Top row: Eight summer spears for sight hunting over hard, sand bottom in shallow water, often at night with gig-light. 1 and 2. From Sag Harbor, L. I.; 3. By Elias Watts, former Keyport blacksmith. It has been reinforced and used by Joseph Vigne of Union Beach; 4. A welded spear from Barnegat; 5 & 6. Wedged spears said to be by Seymour Schutz, former Manahawkin blacksmith; 7. By Horace Erickson, former Barnegat smith; 8. Made about thirty-five years ago by Andrew Bunnell whose shop is in Forked River.

Lower group: 9. Eel-drag from Barnegat; 10. Old gig-light from the upper Raritan; 11. Small gig or spear from Titusville; 12. Winter spear from Flood Gates near Repaupo; 13. Crude spear used by grandfather of Irvie Camburn at Waretown; 14 & 15. Fish spears made by the father of Tilden Estlow at Wells' Mill back of Waretown; 16, 17 & 18. Old New Jersey fish spears.

the teeth. With one of these things dragged along on each side of a garvey or batteau there must have been quite some execution among the eel population.

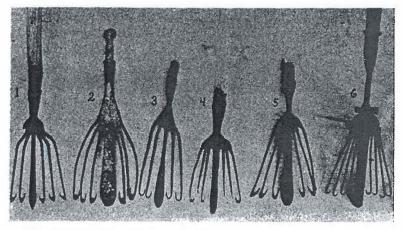
When these fish were really plentiful, the markets were supplied by men using eel pots. For instance, during six weeks of a spring season about forty years ago, Harry Ridgeway of Barnegat caught seventy barrels of eels. But just about every other family along the bay occasionally wanted a mess for home consumption; so almost every man owned a spear or two.

Now this brings entirely different equipment and technique into the picture. There are two types of eel spear or "gig"—the winter, mud spear for probing and snagging through a hole chopped in the ice, and the summer, sand spear for sight-hunting in shoal water. Within these two general types are almost as many variations as there were blacksmiths who made them.

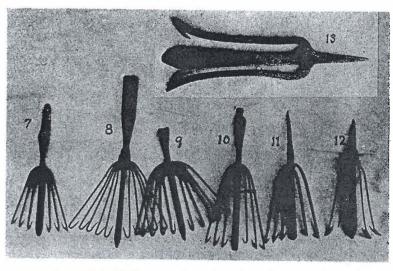
Right here at the moment are thirty-five old spears picked up from fishermen and farmers along rivers and bays of New Jersey. Twenty-six were made for winter use and the other nine for summer. Most of them were built locally and all are interesting examples of the metal worker's craft. In fact, though it may have been unthought of, some of these things are not without artistic quality—with pleasing patterns of sweeping curves and balanced masses.

The winter spear has a broad, flat guard extending nearly an inch beyond the hook-tipped tines lined up at each side. This is to prevent snagging and breakage on old roots and buried timbers. The straight pine or white cedar pole, fitted into the hollow base or on a spikelike shank of the spearhead, is from ten to twenty-five feet long. The kind favored by Harvey Mathews of Keansburg has a short crossbar or handle at the end for operating with one hand.

The summer gig, used in shallow water and largely at night, along with a "jack-light" or torch, is quite different. It has two or four sharp-pointed, barbless tines alternating with springy flattened ones, each ending in a broad, flat, roughly triangular head. This type impales the eel on one



The mud-bottom, winter eel spear thrust down on a long pole through a hole chopped through the ice.



1. From Andy Brown, Barnegat; 2. From Gus Douster, Atlantic Highlands blacksmith. It was found embedded in the masonry of an old building there. 3. From Waretown; 4. From Algebra Brower, Mantaloking; 5. Made by Horace Ireland, former Tuckerton blacksmith. Those five are welded jobs. 6. Bound with iron band below large, visible wedge. This is from Charles Black of Bordentown and was made about eighty years ago by his father, Francis Black, a machinist at Fieldsboro Forge. 7. Made at Sag Harbor, L. I., about fifty years ago. 8 & 9. Heavy spears from Frenchtown on the Delaware; 10. Probably by Horace Erickson, locally famous former smith at Barnegat; 11. From Red Bank; 12. From Raymond Johnson of Waretown. This very old spear not wedged but with iron band at base of times; 13. A very heavy, stiff, 14-inch welded spear found by lake Helzer at Dennisville.

of the sharp spikes instead of hooking her by means of an upward jerk.

In both winter and summer spears, the tines may have been wedged into a hole through the shank or welded together at the base. Gus Douster, Atlantic Highlands blacksmith who was forging eel gigs fifty years ago, has a Scandinavian example with slender, replaceable tines bound on the shank with tough cord.

Along the upper Delaware and inland we find small gigs with five or six uniform tines. These were used indifferently for spearing eels and other small fish.

Shrewsbury River was formerly the favorite hunting ground of eelers, but since the strange disappearance of eel grass even that locality has little to offer.

Whales and Whaling

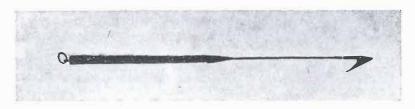
Judging from old records and family traditions, whaling was of importance in coastal New Jersey from sometime in the 1600's until well into the latter half of the nineteenth century. The home ports of professional whalers were probably strung along the shore from the Hook to the Cape. Barnegat, Tuckerton and Cape May have been indicated as former whaling centres. The year 1882 seems to be the latest year mentioned in connection with the industry.

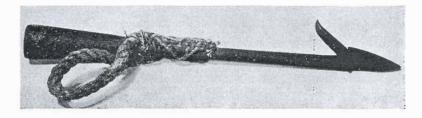
There are still some of these great sea-going mammals in the Atlantic off our shores, but their numbers have been depleted by submarine chasers in recent wars. They seldom appear in the bays and rivers now but are seen well off shore occasionally, and every year or two a crippled one is rolled up to the beach by a severe storm. A sixty-foot Finback or Rorqual was cast up at Mantoloking by the nor-easter on January 24 of last year. This was an individual of peculiar color pattern, being mostly white on the right side and black on the left. A stranded whale is always good for several days in the news and this one "made" the picture pages in more than one paper.

Bill Reid of Waretown tells of the memorable experience of running his boat among a school of whales when the morning sun made a band of rainbow colors on the white mist of each twenty-foot fountain as the animals blew. This was a few miles off Barnegat Light.

Says Burnie Penn of Forked River, "We still have some whales outside the bay: usually see them where the Bluefish are."

A few relics of the whaling industry may still be hidden and forgotten in attics and storerooms along the coastal strip. The Collins sisters of Barnegat have a harpoon used by their







1st: The Inman harpoon at Barnegat.

2nd: Wrought-iron harpoon that belonged to the grandfather of Fred Sprague, West Creek. It is seventeen and a half inches long and has a pivoted barb that swings outward back of the one-sided fluke. When in use this harpoon head with hollow shank would be jerked loose from the wooden shaft, but was attached to a rope tied to a float or buoy. Thus the whale or large fish could be followed for the kill.

3rd: The sixty-foot Finback washed up (in both senses!) at Manto-loking.

great-grandfather, Aaron Inman, in the early 1800's. He worked out of Surf City—then called Great Swamp—and during the War of 1812 had to take his whale oil to Philadelphia because the port of New York was closed. His father, Stephan Inman, is mentioned as a whaler in a manuscript, dated 1833, by J. F. Watson, as quoted in Historical Collections of New Jersey by Barber and Howe, 1865. The iron part of the harpoon in question, including its hollow shank, is thirty-five inches long; its head to the point of the single flat barb is six inches in length. The three-foot shaft of wood has an iron ring at the end for the attachment of a rope. We are showing photographs of this harpoon and the Mantoloking Finback.

"Whalebone," formerly used in the manufacture of corset stays, came from the peculiar strainers on the upper jaws of Finbacks and their close relatives.

Scrimshaw work—fanciful and delicate carving by the sailor men of other days—was done on the ivorylike teeth of the sperm whale, now rare off our coast.



The whale blubber cauldron from Surf City.

Oddments from River, Bay and Shore

The antiquarian rummaging and prying into the secrets of attics and storerooms in the vicinity of Barnegat Bay is sure to find many old items not only new to him but indigenous to that neighborhood and none other.

That popular and useful bay boat, the "garvey," originated there, and so did the sneak-boat—built by a few generations of Perrines and Kilpatricks.

Charles E. Carter, one of the local blacksmiths, built a special kind of ice-hook not seen elsewhere. This iron implement, attached to the end of a white cedar pole, was used for pulling a sneak-boat or skiff through ice not too thick on creeks and thorofares. The broad, leaf-shaped portion of the hook made it well adapted to this purpose. Forrest Carter, the son of Charles, carried on the tradition by making hooks of this type up to fairly recent years.

From Andy Brown comes the wooden fish-line reel made by Jesse Birdsall many years ago. And it was Andy who picked up the net-covered, hollow glass ball used as a lobster pot buoy outside the bay. These glass floats are still used by lobstermen working out from Barnegat City and elsewhere.

Roy Penn, of Waretown, hunting through an old tool-chest, came across the unique pair of copper crab tongs.

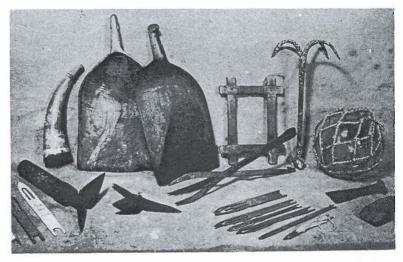
Calking irons and wedges for driving oakum into the seams and cracks of boat bottoms are of general distribution. The iron one came from Sam Cranmer of New Gretna. The oak wedge for the same purpose is from Schealer Ridgeway of Barnegat. So, also, is the four-way grab hook or grapple.

The handmade white cedar scoops are used for baling water out of boats. Some of the baymen make their own scoops—"But," says Oscar Eayre, "the old ship chandlers' shops always used to carry them."

Wooden "knitting needles" for making and mending fish nets haven't changed much in shape for scores of years. The large ones made by Bill Reid of Waretown and John Inman of Surf City are not much different from those smaller old brown ones from up the Delaware.

Powder horns, in use up to the 1880's, may turn up anywhere. One from Howard Perrine of Barnegat has a double row of Striped Bass incised around the larger end, and the figures 1787 extend up the inside curve. One from the Delaware River side is well covered with fine carvings—including a large star with the initials S. D., a schooner, an eagle and a man with a flint-lock gun shooting wild geese. Another old decorated cow's horn is owned by Charles Robinson of Groveville. This one, dated 1839, shows a schooner and a mermaid—with scales, tails and fins—holding a comb in one hand, a mirror in the other.

And this brief list by no means exhausts the possibilities for finding odd gadgets and things unfamiliar to the stump jumper, the hillbilly and the landlubber.



One powder horn; two wooden boat-bailers; a fish-line reel, by Jesse Birdsall; an old iron hook for snagging objects dropped overboard; a blown-glass buoy for lobster pots; two ice-hooks by Charles Carter, former Barnegat smith, used on poles for dragging a sneak-boat through a crust of ice; an old unique pair of copper crab tongs from Waretown; one iron and one wooden calking tool; wooden knitting needles for making fish-nets.

Banks of the Lower Delaware

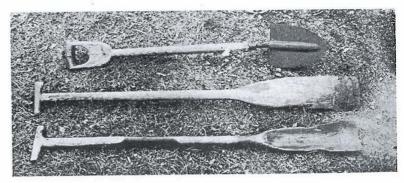
In southern states they are levees; in books they are known as dikes; but along the river bordering South Jersey these long ridges built of earth are called banks. Some of them were built during colonial times to keep the tidal waters from flooding the lowland adjacent to the Delaware and its tributaries. Thus hundreds of meadowland acres were made available for pasturage or for the harvesting of salt hay. In later years some of the banks were kept up in order to control the flooding of muskrat marshes. For that purpose, if for none other, sluices and floodgates were made in strategic places.

Constant vigilance was needful to maintain these banks, for a small tunnel made by a muskrat or even a smaller burrowing animal might soon enlarge and break out to make a breach in the bank.

The picturesque and practical dikes of Gloucester, Salem and Cumberland counties have been lingered upon by many writers, including Weygandt, Dallas Lore Sharp and Gordon of the well-known *Gazetteer*. But we find no mention of the two peculiar tools that were used in the building and maintenance of these earthworks. It is John Wright, boatman of Bridgeport, who urged me to hunt up examples of the mud skiver and the heart shovel.

The skiver is a narrow spadelike thing, usually of ash, maple or sassafras, and about four feet long. The thin, fifteen-inch blade is about five inches wide, slightly concave in front and is tipped with two or three inches of steel and kept very sharp. The handle is a five-inch crossbar mortised on the end of the shaft. Skivers were made by the local wainwright who used a drawknife of proper width and convexity for hollowing the front of the blade. In use the skiver pared off an 18-inch strip of wet mud from the wall of a small hole that was scooped out for a start. A turn of the wrist broke loose each strip of mud which was then thrown, fifteen feet or so, to the place where needed. A skiver was evidently valued by its owner, for most examples that we find have been worn or splintered, then patched with thin pieces of iron, copper or zinc.





Upper: On the "bank" along the Delaware opposite Repaupo.

Lower: A heart shovel from Hancock's Bridge; a mud skiver from Pedricktown; an old, battered one from Bridgeport.

Down toward the head of the bay, where the muck of the brackish meadows is laced with tough roots of grass, sedges and weeds, the heart shovel was required in getting material for the banks. This somewhat resembles the skiver, but the entire blade is a thin, pointed, heart-shaped piece of steel with both edges kept very sharp in order to cut through the mass of fine roots.

Of our two skivers, the much worn one came from Eugene Stanton at Bridgeport. The other—much patched—was in the possession of Sam Straughan of Pedricktown. The shaft of the handle is branded with the name of S. L. Pedrick, who

died thirty-eight years ago and was an uncle of Hamilton Pedrick, the seedsman.

The heart shovel came from John M. Pancoast, a retired muskrat farmer in Hancock's Bridge. It was formerly used by Albert Nickolson, a muskrat trapper up to eighteen years ago. Earl Harris, who now traps his rat meadows near Canton, says that heart shovels are still kept sharp to "Take in a breach" in the bank.

And there you have two old-time, South Jersey implements that few people ever heard of.

Salt Hay-Now and Then

The large red trucks of the Totten fleet in Yardville remind us that Jersey salt hay is still being cut, bought, sold and made use of—but in nothing like the quantity of former years.

The large areas of salt meadows covered with a clean growth of *Spartina patens* are less accessible now. The cutting of deep narrow ditches invited hoards of fiddler crabs that honeycomb the mud at each side, making the ground dangerous for horses or tractors. In some places this factor, combined with the flow of tidewater, has widened the ditches to the extent of several feet. Elsewhere the turf, piled in a ridge alongside, furnishes lodgment for the windblown seeds of "marsh elder" or grounsel tree (*Baccharis halimifolia* L.) and the result is a barrier of shrubs.

The meadows of salt-marsh grass still in good condition are taken care of, usually, by tractor-drawn mowers, though some horse teams are yet in use. The fine wiry hay, formerly used as bedding in stables and for ice house insulation, is now made use of in highway construction, as packing, as mulch or just to hold shifting sands back of the beaches where the natural and picturesque dunes of yesterday have been leveled off for "developments."

In earlier times there were many flat-decked, shallow draft hay-scows in the bays, rivers, creeks and thorofares adjacent to the meadows. Ten or fifteen years ago a few were still afloat and in operation. Now an occasional worm-riddled



Salt Hay

Old photo from Mrs. Hayes Cranmer, with Frank and Bertram Carter; an ox team and wagon with hand hay-press on hay-scow.

derelict can be discovered sunk in a salt-marsh creek or washed up on a lee shore. The one lying in the edge of Inman's Cove just above Surf City is a good example of this kind of craft. Twenty years ago it was used by Walter Martin and the late Milton Crane, both of Manahawkin, when they were getting hay from Main Point. The scow is thirty-three feet long, twelve feet wide and about three feet from deck to bottom. The deck and sides are of two-inch white cedar planks nailed together with $4\frac{1}{2}$ -inch square-cut nails. The bottom is of Jersey pitch pine. In the deck are two hatchways through which a man could crawl to mend leaks—"And a hell of a job that was," said one bayman.

Martin and Crane used a power boat to tow their scow, but before that time two men on board pushed a scow along by using a couple of 15-foot cedar poles. Otherwise, it was towed up a creek by one man on the bank while another followed with a pole to keep the craft off shore. Long ago or later in small meadows where the grass was mowed with scythes, small piles were built over two parallel poles to be picked up by two men and carried to stack or scow.

Fifty years or more ago ox teams were used on the meadows. Several men of Barnegat worked with Sadoc Estlow, who was called the "Hay King." Among these were his son-in-law, Hayes Cranmer, and Henry Carter with his son, Bert. We are reproducing a photograph of 1896. In it are seen Henry and Bert with one of their two ox teams and a wagon with a hand press for baling hay. They are on their scow at the edge of the creek, with "Ned's Knoll" in the far distance. The oxen are accoutered with harness and specially-made collars—like horse collars but worn other-side-up—instead of the old single yokes commonly in use. An ox employed on the meadows was seldom shod, though the local blacksmith, Charles Carter, a brother of Henry's, sometimes sawed horseshoes in two for use on oxen. . . . All this information was got from Hayes Cranmer and the three cousins, Bertram, Forrest and Elton Carter—still residents of Barnegat.

When horses were employed on the meadows their hind feet were enlarged with leather, wood or iron "mud-boots" to keep them from getting mired. These mud-boots—serving in the manner of snowshoes—were made in various forms and with different methods of attachment. Three or four layers of heavy sole leather, copper-riveted, were cut to fit the iron shoes already on the horse and had "uppers" that came up on the front and sides of a hoof. Heavy straps and buckles held the boot on the foot. Charles Weber of Lower Bank used this kind. He said his were made by someone in Hammonton and cost \$9.00 a pair. Similar boots and rounded wooden ones with leather uppers were used on the meadows near Hancock's Bridge.

The sort most favored by Edwin Sooy of Weekstown is a rather thin, flat, rounded, cast-iron thing about ten inches long and nearly as wide. The ones we saw were stamped, "Pat. Mar. 22, 1898." Sooy used only one—on the left hind foot of the horse.

At Cheesequake, in Middlesex County, the Farringtons have been salt-hay men for many years. Several large meadow shoes of wood were found in the barn. They are of one-inch oak boards ten inches long by eight inches wide and either squared or rounded. Each was fastened to a hind

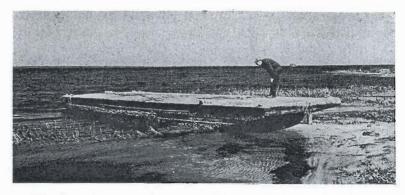
foot by means of two iron clamp things drawn tight by a bolt across the front of the foot. The irons were padded to prevent chafing. The shoes with cast-iron parts are about thirty years old, but those with wrought iron are older and were made in the blacksmith shop on the Farrington farm. These shoes weigh from three to five and one-half pounds each. The present Mr. Farrington now uses a tractor on the meadows, but he recalls that the horses soon got used to the big wooden shoes and learned to back and even trot with them bolted on under the regular iron horseshoes. What a clatter they must have made on the way to the meadows!

Down along the bays, from Forked River to Tuckerton, a very different type of thing came to be used on the salt-hay meadows. This is an ordinary horseshoe—the kind that is nailed to the hoof—with a projecting iron loop welded to one side. Bob Webster, the 79-year-old blacksmith of Tuckerton, furnished the following information:

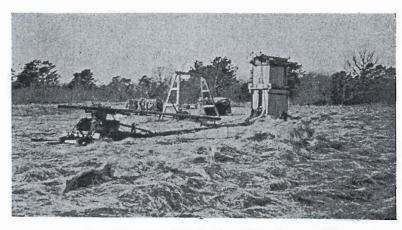
About fifty years ago Charles Mott, a local salt-hay man, brought a new idea for a mud-shoe into the old shop where Webster was in partnership with George Bishop. To show what he had in mind Mott attached a loop of wire to the outside curve of a horseshoe. The smiths went to work on a pair of shoes, adding heavy iron loops to them. The loops were on a level with the shoes; but upon shoeing a horse with them and trying them out, they were found to throw its feet out of normal position when walking. So the loops were bent upward somewhat. This worked very well and thereafter many pairs of such shoes were made by Bishop and Webster. Up to fifteen years ago, several blacksmiths along the shore road were "building" shoes of this type.

At Barnegat, Elton Carter, the salt-hay man, still has four horses—now the only ones in town. He says that not too many years ago there were a hundred in that neighborhood. Elton's uncle, Charles E. Carter, who learned the blacksmithing craft of Chris Hughes in Moorestown, had a shop in Barnegat for many years. He and his son Forrest made a great number of the Mott-type mud-shoes.

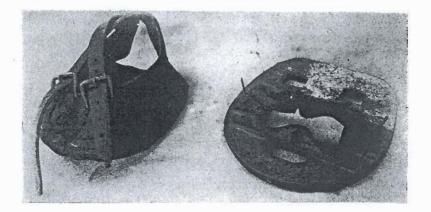
Well, excepting perhaps the activities of a few lingering old-timers, the methods of harvesting salt-marsh hay are not what they used to be. We now see tractors and hay-balers on those meadows that are still safe and easy to work. And the most frequent reminders of the salt-hay business are the big red trucks that rumble and roar out of Yardville.

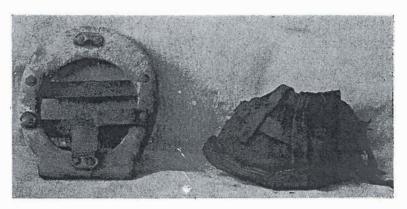


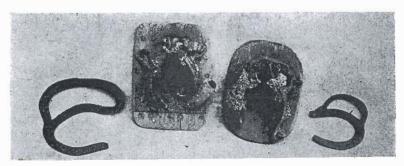
Wreck of hay-scow that was used by "Buck" Martin of Manahawkin.



Horse-powered hay-baler. Photo from Elton Carter of Barnegat.







Mud-boots and Shoes for Horses

Top: Left, leather mud-boot used by the late Charlie Weber, Lower Bank; right, iron shoe used by Edwin Sooy, Weekstown.

Middle: Wooden boot and leather boot in barn of Luke S. Fogg at Canton.

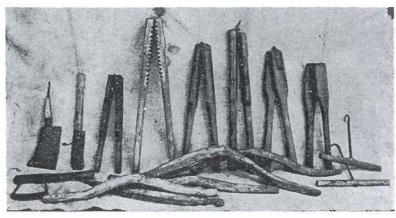
Bottom: Centre, two heavy wood and iron mud-boots from the Farrington Farm, Cheesequake. At each side an outside-loop mud shoe from Barnegat and Tuckerton.

Lard Squeezers

Five years ago I had never heard of a lard squeezer. Then a dealer in antiques brought out a hinged, two-piece, wooden gadget that neither of us recognized. A few days later Mrs. W. B. Wolcott of Riverton explained the use of it: to squeeze the remaining oil from the insolubles left in the kettle after rendering the grease from fats—in short, a lard squeezer.

When hog-killin' day rolled around there was great activity on the farm, and usually neighbors exchanged help for the occasion. After the animals were slaughtered, scalded in a huge iron kettle and their bristles scraped off with the bases of old candlesticks, they were hung up by their hocks in a strong frame or gibbet. A curved sharp-ended stick—frequently of laurel—was used for this purpose. It's called a gambrel. After the hog was drawn, the cleaver, saw and butcher knife came into play.

After that the women took over. There were hams and sides of bacon to be smoked, pork to be put down in brine, pig knuckles to pickle, headcheese and sausage to make. The extra scraps of fat were put into a kettle and tried out for lard. When all possible grease was melted out, the insoluble



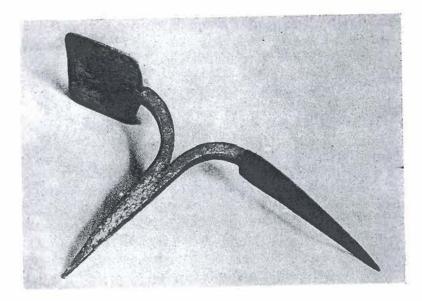
Six lard squeezers, two cleavers, one chopper, two hog hooks and five gambrels or "spreaders."

Onion Hoe or Planting-tool?

At first this hand-forged garden tool was assumed to be a planting-hoe—the 5-inch, arrow-shaped part for making a hole or a trench; the hoelike side for covering the seeds or the roots of a plant. It could have been used in that way; but perhaps we should defer to the opinion given by Wm. Budd Paul, for twenty years a Manahawkin blacksmith but since 1920 retired from that craft. Said he, "It's an onion hoe and the first I've seen for many years. Older than we are." And each of us has passed the three-score mark.

From the fact that it was found by Donald Groff of Wading River and not too far from there, we may suppose that it was built by one of the former blacksmiths whose shops were strung along the shore road fifty or more years ago. Billy Pangborn, W. S. Wright, Billy Craig and Seymour Schutz made the sparks fly at Manahawkin before Budd Paul came along. At Tuckerton, Jacob, Horace and Will Ireland, consecutively, were followed by George Bishop and, later, by Robert Webster. John Haywood was in Warren's Grove. Among the New Gretna smiths we hear the names Fin Hilliard, Gus Mortimer, Joe Truax and Ned and Nicholas Johnson. There was Fred Miner in Green Bank. In addition to all these who were professionals, some farmers and baymen did their own blacksmithing.

Whoever conceived and made this double-action hoe, it looks to be a practical implement. . . . But one needs the Groff eye to spot such a thing in a clutter of junk.





Upper: The onion hoe from Wading River.

Lower: Various terrestrial tools: two grubbing-hoes; a mattock dug up at Spring Hill near Chatsworth; a pick dug from the slag-pile at Hanover Furnace; a sort of pick from the Cutts Brothers of Tabernacle; the problematical ice-axe from Willow Grove, N. J.; a float-hoe from Forked River.

Foreground, from left again: onion hoe; scuffle-hoe from Andy Brown's garden, Barnegat; hand-forged weeder from Pemberton; a wooden homemade dibble—to make holes for planting plants.

Yokes, Pokes and Hobbles

Instead of being the style of some firm of solicitors concocted by Dickens, here we have the names of certain simple contraptions which were made to limit the actions of domestic animals. Wooden yokes were put on the necks of oxen and attached to a vehicle or plow. The animals could walk but must drag something behind them.

There are double ox yokes and single ones. The cumber-some crossbar that rests upon the necks of a team may have been factory-made—like the large one illustrated—or per-haps it was hewn and whittled by hand, as were our smaller examples. A bow, or slender loop-like stick, went under the neck of each animal. This was often made from a hickory sapling that had been bent over by degrees and forced to grow into a permanent U-shape. A strong iron ring fastened to the underside of the yoke at its center held up the tongue of the wagon, while chains for "tugs" lead back from the ends. A few decades ago we could hear the driver of a yoke of oxen cracking his whip or shouting "Gee!" and "Haw!" to his team as they went by with wagon or sled—much more bucolic sounds than the toot of an auto horn!

Lighter single yokes of various types were made to hang on the necks of smaller animals—sheep, pigs and such. These have projecting ends to catch on fences or places where escape might otherwise be possible. That's the idea, though I, personally, have never seen one of these outsize collars being worn. In our illustration the bow with a long crosspiece was called pig yoke, while the arrangement of four cross-sticks was said to have been used for unruly sheep before 1860. It came from up Ringoes way.

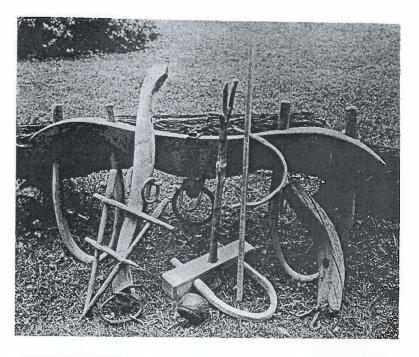
A large bow with a short stout crossbar through which a long stick extends forward—such a rig is known as a "poke" It is put on the neck of a critter with fence-jumping inclinations. Some pokes were neatly and ingeniously constructed, but the one shown here is a crude, primitive affair.

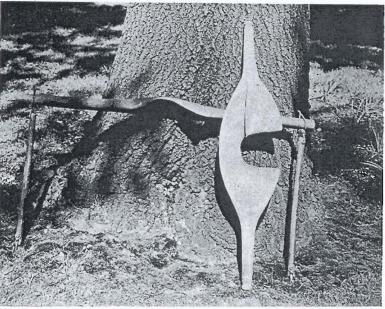
A hobble may be a short length of strong rope attached to one front and one hind leg to discourage a cow or horse from running or jumping. Or it can be a fairly heavy ball with a very short chain and a ring of leather strap to be buckled on the foot of a horse. Old Dobbin can then hobble around to graze in the barnyard and use a bit of horse sense about trying to see much more of the world.

I have been reminded that another type of thing, the human yoke, has been used for many centuries to carry small burdens suspended from men's shoulders. It is a spindle-shaped piece of wood, tapered to slender ends, concave on one side and convex on the other. At the middle of one margin there is a large scallop to fit around the back of a man's neck. From each end of the yoke a wooden rod, a light chain or cord hangs down, arm's length, to be hooked into the bale of a bucket or basket. Thus the weight of the two balanced burdens is put on the shoulders and back without tiring the arms and hands.

Such yokes were often made of willow wood because of its lightness. However, the one shown here with end rods is probably of ash. This example was found by the eagle-eyed Ah Collier of Bordentown.

William Bacon Evans of Moorestown recalls that, in the northern states and Canada, yokes are used sometimes when a canoe is carried over a portage.





Upper: Three ox yokes—one single; three pokes to hamper the freedom of farm animals; one hobble, a two-pound ball of lignum vitae with chain and strap.

Lower: Two human yokes for carrying burdens.

From the Bogs

Several implements used in the blueberry fields and cranberry bogs of today are represented among old-fashioned things by rather crude, handmade pieces of equipment of similar functions. Blacksmiths and woodworkers within reach of the Pine Barrens made these things.

Some cranberry and huckleberry scoops were constructed by experts, but others were built up from materials found at home. The old scoops with straight wooden teeth have mostly been picked up to serve as magazine racks, and not a few of the curved-tooth ones made by Dave Applegate of Chatsworth are used for the same purpose.

Small scoops for gathering low-bush huckleberries have stiff wire teeth set close, but large ones still in use are made with a rounded front edge without teeth.

Large turf axes for cutting ditches and getting squares of turf used in the building of dykes are found throughout the Barrens. The old ones, made at home or by the local blacksmith, are variable in shape. The blades of some are of steel from a discarded circular saw, while others came from the earlier up-and-down saw.

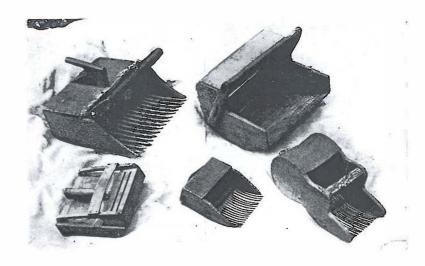
We have found one heavy, two-tined fork that was used many years ago for moving turf.

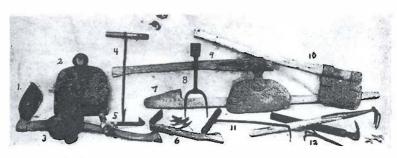
Small, three-toothed, iron hooks set in short, oak handles were for pulling out roots of sedges, chain fern bracken and redroot—all bothersome weeds in cranberry bogs. Of two hooks shown here, the one in a handle is from Eugene Corliss of Waretown and was "built" by Charles E. Carter, a former Barnegat blacksmith.

"Weeding" is a never-ending problem in cranberry bogs. In addition to one-, two- and three-tined weed hooks, a small tool called the dart has been in use for years. This is the implement for yanking out maple seedlings.

The very narrow hoe from Dover Forge Bog was used for cutting out tussocks of sedge. "Float hoes"—like garden hoes but heavier—helped the turf axe in cutting out "floats" or squares of turf for the building of dams, etc. Our smaller

one, hand-forged, is from Andy Bunnell of Forked River: the large, heavy example is a thing brought over from Europe in the middle 1700's.





Huckleberry and Cranberry Tools from the New Jersey Pine Barrens

Upper: Top row: Homemade cranberry scoop and huckleberry scoop from Hollis Koster, Green Bank.

Lower row: Left, patent huckleberry scoop from Mt. Misery; middle, a homemader from Mrs. Truax of Green Bank; right, from Batsto.

Lower photograph: 1. Grubbing hoe from Stevenson, Chatsworth; 2. Heavy, eighteenth century European hoe for pioneers; 3. Float-hoe from Andy Bunnell, Forked River; 4, 5. Darts from Lew Haines, Chatsworth vicinity; 6. Weed-hoe from Applegate, Dover Forge; 7. Old Style oak "punch" for setting new cranberry plants, hunted up by McDonald and Wills at Bulltown; 8. Old sod fork from Aserdaten; 9. Turf axe from Whiting; 10. Turf axe made by Irving Cook of 'Hawkin; 11. Single weed-hook from Burr's Mill; 12. Three-tine weed-hooks.

Pots, Kettles, Cauldrons

Cast-iron kettles, more or less bulbous in form, were indispensable in former times. Many of these are still in existence. In size they range from little six-inch fellows with three peg legs to three-hundred-pounders nearly four feet across that were used by whalers along the coast for boiling the oil out of blubber. Chester Allen of New Gretna tells me of still greater cauldrons that were used in a fish-oil factory out in the bay.

During colonial days and perhaps shortly after the Revolution there were saltworks in the meadows between Toms River and Tuckerton. Large, rather shallow kettles were used there; but British raiders, bent upon crippling local equipment, came along and smashed them. One such, with a large piece knocked out of a side, was dug from the bed of a small brook near the Barnegat meadows. Now, partly buried again, it serves as a miniature pansy bed in a dooryard. This kettle or pan is thirty-nine inches across at the rim by thirteen inches deep and is peculiar in having a pair of large angular loops welded to the sides. It may have swung on chains from a stout tripod or horizontal bar.

They say there is a "galded spot"—a small area in the meadows where no plants grow—that may have been the site of a saltworks near Barnegat, but this is now well defended by the mosquito air arm and has not been explored.

The blubber pot, said to have been used by the Inmans on the beach at Surf City (then called "Great Swamp"), is 43.5 inches across and two feet deep. A pair of two-inch trunnions or knobbed pegs welded to the rim served in supporting the kettle over the fire. But now, outliving a century or more of oblivion, it is not known what sort of framework held it up.

A smaller, legless round-bottomed kettle with a flat rim and set in the top of a small brick oven, indoors or out, is said to have been used for various purposes such as boiling the family wash, making soft soap or cooking up a large mess of stew. One that we show has a 23-inch diameter and a 16.5-inch depth and is unusual in having a pair of fixed loop handles. E. F. Bowker, seen examining this pot, says that

it was picked up at a sale. It is now used as a water bowl for sheep on the old farm near Tabernacle.

The kind of iron kettle most often met with is a bulging pot with three short legs and a strong bail. Varying in size up to five-gallon capacity, it swung from a fireplace crane. In some old-time kitchens of the Jersey hinterlands one may still get a lingering whiff of stews cooked in such pots—who can say how many years ago?





Cast-Iron Kettles

Top: E. F. Bowker with unusual kettle at Tabernacle.

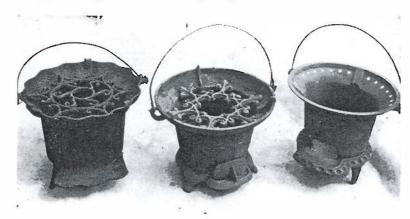
Bottom: Shallow salt kettle at Barnegat. Note the break in right side, supposedly by British raiders.



Large blubber pot from Surf City; three fireplace kettles.

Charcoal Urns

We have not seen many of these little three-legged, castiron, portable stoves—perhaps a half dozen, all told, surviving singly in storerooms, attics, barns and dumps down through The Pines and along the bay shore roads. Each is about ten inches high, a foot across the flaring top, has a strong wire bail, a little hearth in front, a barred grate set in above the bottom and an ornate grill for the top. Some have three small projections coming up from the rim, perhaps to support a grid for making flapjacks.



Three little charcoal stoves from The Pines of South Jersey. They are still convenient for small-scale out-door cooking.

The one shown at the left was found hanging up in a small shed near Lakewood. When it was taken down two deer mice popped out through the grill; they had filled the urn with a sumptuous, feather-lined nest.

The central example, complete with cover for draft-hole. was in George Smith's storehouse near Waretown.

The right-hand one with perforated rim was picked up from a dump several years ago in the outskirts of Warren Grove.

Don Streeter of Iona thinks these little stoves date from the 1840's, but I have found no one who can more than guess at their original uses.

Dated Things

Marked with a date, name, initials or sentiment any oldtime product of human craftsmanship is of special interest. In addition to the facts given, it offers more appeal to the imagination.

No doubt many recent imitations falsely dated have been put on the market. Some dealers in antiques get quite carried away with a spirit of enthusiasm and salesmanship, and I am not too good at sorting the wheat from the legpulling. However, the old oaken bootjack seems to be authentic. Why should such a trifle have been faked for the small amount asked for it? It was said to have come from an old Price family in Monmouth County. The letter P. is cut crudely and deeply on the top, and just below that is the year date 1777, beneath which is another period. The cross cleat on the underside is fastened on with two oak pegs, and each of these has a spreading wedge driven into the upper end. The first peg holes were bored too far forward; but this carefully shaped. quarter-sawed piece of oak was not to be wasted. The wood is a deep golden brown and very hard. There is every appearance of age.

The times that try men's souls seem to be the times for the exercise of unusual ingenuity and resourcefulness. As it is now, so it was right around the Civil War period. Those, too, seem to have been the days of many inventions. We find a variety of utensils and containers for use around the house and barn, and many of these are marked with patent dates ranging from the late 1850's into the '70's. Numerous glass fruit-jar types were made then in South Jersey factories.

At least two kinds of nutmeg graters date from 1870—but more about these in a previous entry. Turning to the products of earlier years, dates and makers' names are rather less frequent. When they do occur it is likely to be on homemade things or special presentation pieces. Among such treasured objects are samplers, quilts, coverlets, wooden chests, powder horns and such. One dark amber chestnutshaped bottle has the owners's name and 1831 crudely scratched on one side.

To all intents and purposes a chamber-mug is a chamber-mug and seldom anything more. But while excavating an early pottery site in Cheesequake we found fragments of one with 1776 boldly brushed on one side. This at once raised it above the commonplace, and here it is—hovering perhaps midway between the sublime and the ridiculous.



Two salt-glazed stoneware chamber-mugs from pottery dump on the Matey farm, Cheesequake, New Jersey. The lettering and decorations are brushed on in dull blue. Reconstructed from fragments.

"The Gypsies are Back!"

A sign of spring, that was. During the 1920's full many a pleasant hour was squandered away in a Romany camp along the Rancocas. "O tan dannach" (The Tent Place), they called it. After several visits that proved harmless and mutually entertaining, their usual greeting was, "Cushka divvus, Romany pal!"-which meant, "Good day, Gypsy brother!" Then we would "besh on the pus"-sit on the straw—and exchange comments on life in general and gypsy life in particular. I never found them deep in the Pitch Pines of the Barrens, but rather in those borderland groves of Jersey Scrub Pine not many miles from the Delaware. There should be patches of young sassafras for the making of rustic flowerstands and such-like salable outdoor furniture, and a "bitty gav"—a small town— within easy walking distance. The horse and wagon were on the way out of use and the used car was coming in. The "Cuver"—the thing—it was called; for, naturally, there is no old Romany word for an automobile. It soon became evident that we were using the very language learned by George Borrow in rural England a century ago.

These people, so characteristic of our countryside yesterday, were amiable and interesting—once the barriers of strangeness were hurdled. One evening, a visiting woman from another clan hailed me with the name "Jukel's Minge" —no translation, please!—but the incident was bounced off with a grin and we became friendly enough.

There was and still is some fortune-telling by the Romany rawnies, but the bright and picturesque garments of earlier times had largely given place to the less conspicuous styles of contemporary "gorgios"—or non-gypsies. One thing that made quite an impression was, though there were always several chavies playing around, none was ever heard to whimper or cry; nor was there any snapping and scolding by their elders.

After a lapse of several years these same people were come upon in camp near Paulsboro. I took a camera shot at Lottie,

now grown up, and we tried to recapture the spirit of former days. But somehow the atmosphere was different. We would never again all rally round a woodland campfire and "fleet the time carelessly, as they did in the golden world."

Addendum

or

The Tale That Wags the Dog

There has been no deliberate intention to follow in the wake of G. B. S. whose preface and postscript may be more meaty than the published play between them—a sandwich inside out. But some general cogent remarks found no room for themselves within the preceding sketches.

For instance, what should they be called, anyhow? Sketches? Notes? Chapters? Pages? Perhaps they should have been written in the form of letters addressed, say, to Harry B. Weiss, who cheered them on. Or these notes echoing the activities of "old salts" and baymen could have been done into a Seashore Symphony—with booming surf and spanking wind and the treble overtones from waterfowl and snipe.

Well, Gilbert White of Selborne addressed his letters to Thomas Pennant and others; Cornelius Weygandt, happily of our own day, wrote "A Delaware Symphony." But we hasten to say that comparing the present efforts with those achievements would be malapropos, irrelevant and incompetent; so the objection may be sustained.

The data, information and photographs incorporated here were furnished or made possible by scores of people in various parts of the State of New Jersey. Not a few of them have shown pleasure and pride in being helpful. The outcome, then, is really a joint production. To mention all names would make it look like a census or a tax list! Omissions are regretted but unavoidable.

Much good material for additional pages has been collected. There has to be a limit to the amount presented. Many agricultural implements and methods of old have not been dealt with at all. The bay-shore folk will think of numerous things that I have skipped or touched upon too lightly. Believe me, there's something more than coy oyster and curvaceous clam to beckon the baymen down to the Bay. They love it.

New Jersey, for all her modest square-mileage, is jampacked with folklore, implements and oddments hoary with age. The antiquarian knows full well that many an old attic is cluttered with treasures—"of no importance." Sometimes, as we have found, a laboriously homemade accordion turns up, or a venerable violin is gathering dust and perhaps occasionally twanging ghostly little tuneless tunes inaudible to the naked ear.

Yes, there are volumes waiting to be filled, but space is limited and time's a-wastin! We must roll up our cursory contributions and go to press!

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About the Author

Robert J. Sim was an entomologist, antiquarian, writer and natural history artist. From 1924 until his death on November 26, 1955, at the age of 75, he was an inspector with the Division of Plant Industry, New Jersey Department of Agriculture. From 1923 to 1934, he also was a scientific illustrator for the United States Bureau of Entomology. During his early career, he was an artist for the Pennsylvania Bureau of Plant Industry and an illustrator for the United States Biological Survey.

During his many years in New Jersey, he became interested in the utensils, tools and gadgets used on early New Jersey farms. He wrote a number of articles and books on the subject for the Department and for the New Jersey Agricultural Society. He had also written a paper on June beetles of the United States and Canada.

Mr. Sim was an authority on pottery, particularly on redware pottery, and wrote several articles on that subject. In his later years, he specialized in reconstructing examples of early New Jersey pottery.

He was also a talented photographer and his paintings, drawings and photographs illustrate many publications. His knowledge of the wild flowers, trees, shrubs, animals and insects of New Jersey was extensive.