The TOOL SHED

Number 18 September, 1981

A Journal of Tool Collecting published by CRAFTS of New Jersey

SURVIVAL TOOLS OF COLONIAL NEW JERSEY

(The following article is reprinted with permission of the Museum of Early Trades and Crafts, Madison, N.J. Originally entitled "Survival Tools," it appeared in a Museum bulletin and is based on the Museum's continuing research on the early tools, trades, and crafts of New Jersey.)

Each family to settle in the hills of New Jersey in the late 1600's and early 1700's brought a set of tools. Like all their pssessions, tools were limited to only those which could be carried on their backs or on the backs of their oxen. They had no wheels or no roads to follow. One family at a time made their own way on foot through the forest. Deciding what tools to bring was determined by a critical balance between what was necessary to survive and how many could be carried. With about a dozen very simple, basic tools they could clear the land, construct a shelter and start a garden.

The settlers may have been limited by what could be carried on their backs, but their was no limit to the knowledge carried in their heads. They were good problem solvers. Most were grandchildren of the English families that settled on the eastern end of Long Island about fifty years earlier. Working side by side with their parents and grandparents, they grew up learning how to survive. Experience had taught them what tools they must bring with them as they came to resettle in New Jersey.

Included in a typical early set of survival tools were an axe, a broad axe, a two-man rip saw, a froe, an auger, a chisel, a draw knife, a shovel, a turf hoe, a field hoe, a bark spud, and a cleaver.

Undoubtedly the most important tool of all was the axe. It was used to solve their first concerns. First, a hole had to be cleared in the forest to allow the sun to shine on their garden and, second, a building had to be constructed to shelter the family and the animals. All of the other tools they brought had specific uses. A bark spud removed bark from trees selected as timbers for the house. These logs were squared into posts, beams and

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FARNHAMS TO HOST SEPTEMBER 13th MEETING

CRAFTS of New Jersey will open its 1981-1982 year on Sunday, September 13, with an out-of-doors, picnic meeting at the home of Alex and Barbara Farnham in Stockton. Last year's meeting at the Farnham's was a tremendous success, with more than 150 persons present.

Note: In case of inclement weather the meeting will be canceled. If you have any doubt as to whether or not the meeting will be held, call Steve Zluky, (201)534-2710, after 9:00 a.m. on the thirteenth.

The meeting will begin at 11:00 a.m. with the "Swap & Sell." Anyone who remembers the fine tools that changed

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CRAFTS of New Jersey

Collectors of Rare and Familiar Tools Society of New Jersey

PRESIDENT ——— Stephen Zluky, Whitehouse
VICE PRESIDENT —— Harry J. O'Neill, Annandale
SECRETARY ——— Robert Fridlington, Cranford
TREASURER ——— C. Carroll Palmer, Plainfield

Membership in CRAFTS is open to anyone interested in early trades and industries, and the identification, study, and preservation of tools and implements used and made in New Jersey. Annual dues are five dollars for the membership year of July 1 to June 30. Membership fees may be sent to the Treasurer: C. Carroll Palmer, 725 Pemberton Ave., Plainfield, N.J. 07060.

The Tool Shed

Published five times per year for members of CRAFTS of New Jersey. Editor Robert Fridlington, 8 Keith Jeffries Ave., Cranford, N.J. 07016. Contributions, especially about New Jersey tools and trades, are welcomed.

(Sept. 13th mtg., cont'd from page 1) hands last year will not want to be late for this.

When the supply of tools (or money) runs out, we will eat. Again this year, CRAFTS will supply the hamburgers, hot dogs, and a variety of beverages. However, each family is asked to bring a casserole, or a salad, or a dessert. And if you plan to sit down while enjoying the victuals, you must provide your own chair.

Steve Zluky has also asked that members bring along some special or unusual tools--perhaps your favorite mini-collection--to display.

If the meeting should be canceled because of bad weather, the next meeting will be held on November 22, at East Jersey Olde Towne.

To get to Alexander Farnham's farm take:

I-78 to the Clinton-Pittstown exit.

Rte. 513 to Frenchtown.

Rte. 29 (South) for five miles to Timber Falls Road and turn left (look for CRAFTS sign).

Farnham's is the second driveway on the left.

TOWNSEND HEADS E.A.I.A. ANNIVERSARY PROJECT

CRAFTSman Raymond R. Townsend of Williamsburg, Va., has been appointed Chairman of the Early American Industries Association 50th Anniversary Historical Project. The aim of the project is to compile a comprehensive history of the EAIA.

Well known to members of the tool fraternity everywhere, Ray served on the staff of Colonial Williamsburg for 26 years and later worked for National Heritage in Canada. He was also editor of the EAIA Chronicle for 15 years.

An indefatigable researcher and writer, his articles on tools have appeared in a variety of magazines and journals. It is not widely known, but Ray can also take credit for the many articles by J. Didsbury and Raymond Roades--both pseudonyms he has used over the years.

But Townsend is probably best known for his generosity and his willingness to share his immense tool knowledge with others.

Our congratulations to Ray Townsend and to EAIA on his appointment.

"Did it ever occur to you that it might have been made by a cave WOMAN?"

DO PENNIES MAKE SENSE?

CRAFTSman Burton Wilson of Santa Barbara, California, has given us the answers to the "two questions everyone has asked all of their life about nails."

First, what does that "d" stand for, as in "10d," when referring to nails? And second, what is meant by "penny"?

The "d" is simply the abbreviation for penny, which is an English coin. But why, one might ask, is a "d" the abbreviation for penny? Well, it is because "d" is the initial for denarius, which was a Roman coin.

If you follow the logic in that answer, the rest of this is going to be child's play.

Now to the second question: what is meant by "penny," when applied to nails? To assist in answering this one, Wilson thoughtfully provided a page from the Stanley Catalog No. 34 (1929), which is reproduced below.

CUT NAILS AND TACKS

THE TERM "PENNY" AS APPLIED TO NAILS

The origin of the terms "six-penny," "ten-penny," etc., as applied to nails, though not commonly known, is involved in no mystery whatever. Nails have been made a certain number of pounds to the thousand for many years and are still reckoned in that way in England, a ten-penny being a thousand nails to ten pounds, a six-penny a thousand nails to six pounds, a twenty-penny weighing twenty pounds to the thousand; and, in ordering, buyers call for the three-pound, six-pound, or ten-pound variety, etc., until by the Englishmen's abbreviation of "pun" for "pound," the abbreviation has been made to stand for penny, instead of pound, as originally intended.

LENGTH AND NUMBER OF CUT NAILS TO THE POUND

SIZE	Length	Common	Clinch	Fence	Finishing	Fine	Barrel	Casing	Brads	Tobacco	Cut Spikes
¾	¾ in.						800				
⅞	⅞						500				
2d	1	800			1100	1000	376				
3d	1¼	480			720	760	224				
4d	1½	288			523	368	180	398			
5d	1¾	200			410					130	
6d	2	168	96	84	268			226	126	96	
7d	2¼	124	74	64	188				98	82	
8d	2½	88	62	48	146			128	75	68	
9d	2¾	70	53	36	130			110	65		
10d	3	58	46	30	102			91	55		28
12d	3¼	44	42	24	76			71	40		
16d	3½	34	38	20	62			54	27		22
20d	4	23	33	16	54			40			14½
30d	4½	18	20					33			12½
40d	5	14						27			9½
50d	5½	10									8
60d	6	8									6
	6½										5½
	7										4½
	8										2½

TABLE FOR ESTIMATING QUANTITY OF NAILS

Material	Size of Nail	Lbs. Required
1000 Shingles	4d	5
1000 Laths	3d	7
1000 Square Feet Beveled Siding	6d	18
1000 " " Sheathing	8d	20
1000 " " "	10d	25
1000 " " Flooring	8d	30
1000 " " "	10d	40
1000 " " Studding	10d	15
1000 " " Furring 1 x 2 in.	10d	10
1000 " " Finished Flooring, ½ in.	8d to 10d Fin.	20
1000 " " " " 1½ in.	10d Fin.	30

STANLEY

FISHER & NORRIS

The following article is reprinted from New Jersey's Leading Cities Illustrated (New York: J. M. Elstner & Co., 1889).

Fisher & Norris. —Anvils, Vises and Rail Joints; Fair street. —It would be impossible to review the commercial and industrial features of Trenton, or the state of New Jersey, without making more than passing reference to the time-honored firm of Fisher & Norris, whose vast industry on Fair street covers an area of about six acres. The commercial and progressive history of this concern, from its organization in 1841 up to the present time is not alone interesting and suggestive, but marks a most era in the industrial and manufacturing history of this country. Nearly half a century ago in Maine a scientific man named Fisher and one named Martin joined in business for the purpose of making anvils. In 1848 Mr. Martin died, and Mr. Norris, a young lawyer, took his place. The firm name was changed to Fisher & Norris, and it has remained so since. The business was successful, but both partners were aware that the state of Maine was not the proper place to manufacture goods, the market for which was so far distant. In casting about for a locality that would combine the elements of accessibility, quick transportation, etc., Messrs. Fisher & Norris happily selected the city of Trenton, and immediately recognized the superior advantages it possessed over other cities, in this, that it was centrally located between the two largest cities in the United States, New York and Philadelphia, and was accessible by railroad, river and canal. These advantages, combined with an ample water power, determined upon their settlement here. The judgment of their selection was long since demonstrated when the firm rose to the foremost position in the trade in America. In 1846 Mr. Mark Fisher discovered the process of welding steel to cast iron, and a year later he was awarded letters patent. The process greatly enlarged the iron industry of the United States, and made serious inroads upon the iron imports from England. All the anvils used in America up to that time were made in England and Germany; to-day three-fifths of those sold are made by Fisher & Norris. Feeble imitators from time to time have cropped up throughout the Union, but this is the only establishment of the kind now in successful existence. Mr. Fisher invented many useful processes and improvements, and had thirty patents granted him. Prominent among these is the Standard Fisher Rail Joint, a contrivance which joins rails, and which, when screwed down, fixes the rail vertically and laterally into position, and exactly in the same horizontal position. There are many other advantages possessed by this clever device, the practical value of which is demonstrated by the extensive use to which they are put on leading railroads. The Eagle anvil made by this house has obtained a world-wide reputation, and is admittedly the very best made anywhere. It is made of gun metal—crystallized iron—which neither settles nor breaks, and not only the face, but the horn also, is of best tool cast steel, welded on so perfectly by the process of its original and only inventor, Mr. Mark Fisher, that it will not come off, and it is so hard that it will always remain so. And in this connection it is only necessary to say that no other concern in the world can honestly duplicate this claim. Mr. Mark Fisher died in 1871, and, a year later, his partner followed him to his final home. But the business fell into competent hands, in the person of Mr. Clark Fisher, son of the former senior, and a native of Maine. He is now sole proprietor. After passing through Trenton Academy, he entered

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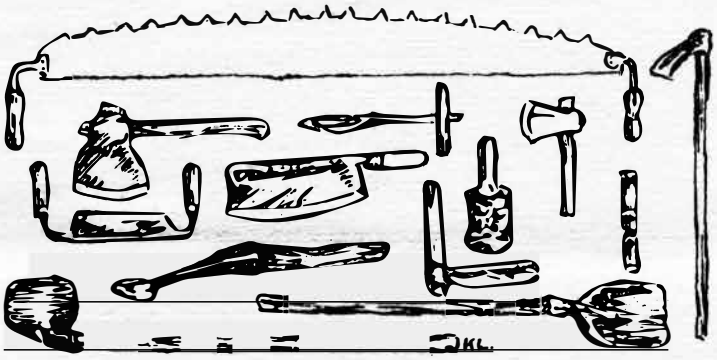
(Survival Tools, cont'd from page 1) rafters with the combined use of the axe and a broad axe. Mortise and tenon ends were formed with a saw, a chisel, or both. An auger was used to bore holes through each mortise and tenon joint. Wooden pegs, shaped with a draw knife, were driven into the holes to lock the joints together.



Most early houses were only 16 feet by 18 feet, primarily because no timber could be heavier than what one man could carry. The family house consisted of one room, a loft and a fireplace with a lean-to shed for the animals. Children of that first generation grew up in windowless, one-room shacks. Slicing siding boards from a log was done with a two-man rip saw. A froe struck with a wooden beetle split roof shingles and lath.

The next immediate concern was to start a garden. One acre was necessary to feed a family and their animals for one year. There was neither time nor muscle to remove stumps. Seeds were planted in and out among the stumps in soil broken up with a turf hoe. Growing plants were cultivated with a field hoe. Often as much as fifteen years passed before the rotted stumps could be cleared from the garden.

Every man brought with him the knowledge of butchering animals for food. Among the set of basic tools each had a meat cleaver.

Their tools changed very little during the first twenty years or so. Even by the early 1700's when the grown sons enlarged the house and created some simple pieces of furniture, it was with the same basic tools that built the first one-room shack.

The population grew slowly year after year during the mid-1700's. Grandchildren began to add their muscles to the work force. More and more families migrated into the hills of New Jersey bringing with them a larger selection of tools than their predecessors brought a generation before.

Among the new tools were corn hooks, hay forks, pitch forks, flails, grain shovels, shoulder yokes, oars, eel spears, hay knives, post hole diggers, rakes, scythes, sickles, iron wedges, and sledges. Almost all were related to farm work and could still be considered survival tools.

By the time of the Revolutionary War, the great grandchildren of the original settlers were joined by thousands upon thousands of new settlers. These people were attracted to New Jersey because of the new economy encouraged by the large amounts of iron New Jersey supplied to the war effort. Population centers began to form, which in turn attracted all sorts of tradesmen. These men had been apprentices and brought with them the sophisticated tools of their craft. Simple machines were being created to take the place of many of the early survival tools.

MEMBERSHIP DIRECTORY

CRAFTS membership directory will be sent out in September.

In the meantime, we want to extend a welcome to two new members who joined after the directory went to press.

They are Bill and Esther Neyer, 306 Birchland Ave., Mt. Joy, PA, 17552. The Neyers are well known to most of our members as the owners of Birchland Antiques, which carries an outstanding line of primitives, country-ware and tools.

CRAFTS CELEBRATES THE FOURTH OF JULY

CRAFTS of New Jersey helped East Jersey Olde Towne celebrate a safe and sane (and extremely wet!) Fourth of July.

A remarkably large crowd braved pouring rains to attend the festival of Early American crafts, exhibits, and activities commemorating America's 105th birthday. This was the third consecutive year that CRAFTS has participated in the EJOT celebration.

The CRAFTS contingent sought refuge from the rains inside the Williamson Blacksmith and Wheelwright Shop and improvised new arrangements. Although it was crowded, both the demonstrators and the visitors enjoyed themselves immensely.

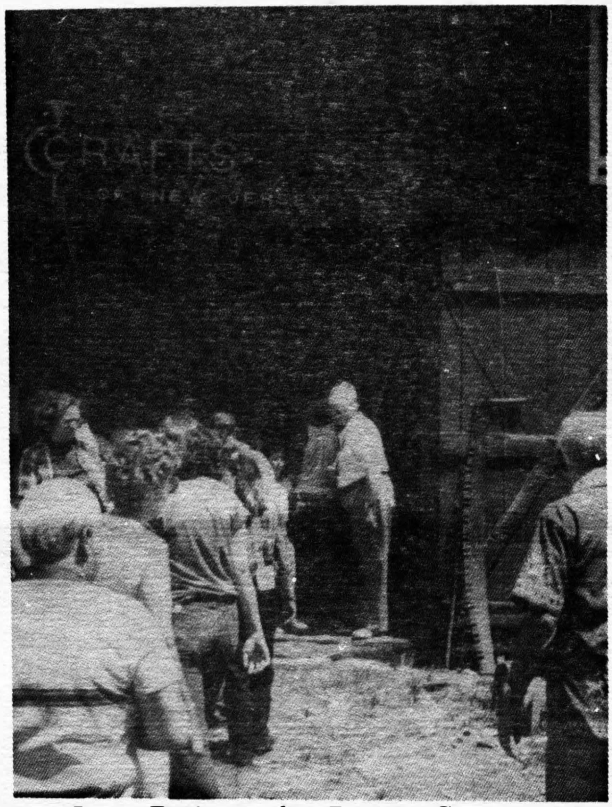
Harry O'Neill, who had organized the Society's exhibits, spent most of his day demonstrating his skill on a treadle-operated lathe. Bill Gustafson exhibited his skill with wood-working tools and described the merits of a beautiful cherry cradle on which he was putting the finishing touches.

For the second year in a row, Don Lipsey fascinated the youngsters--and many of the oldsters--by turning out an endless supply of "snakes" on a pedal-powered jig saw. Carroll Palmer demonstrated restoration techniques--and still found time to sign up some new members.

Chuck Granick showed his mastery at the great-wheel lathe by turning an elaborate newel post. Twelve-year old John Fridlington put in one day as an apprentice turner under Granick's tutelage, while John's father heroically provided power at the wheel.

Soggy but undaunted, only Herb Kean refused to come inside. With the spectators standing inside looking out, Herb hewed timbers in the rain.

The climax of the day came in the afternoon with the formal dedication of the Williamson Blacksmith and Wheelwright Shop. The shop, which originally stood on Route 27 between Three-



Just Before the Rains Came

Mile Run and Six-Mile Run, was built about 1760 and was a working blacksmith shop until about twenty-five years ago. CRAFTS of New Jersey is the advisor for the shop's restoration.

SPECIAL NOTICE!!

The pictures on page 8 of this issue are taken from the reprint of the Henry Arthur 1874 price list of leather and findings, published by CRAFTSman Alexander Farnham.

The Henry Arthur firm, established in 1855, boasted that it was "the largest and most complete leather and finding house in the United States."

The reprint is paperbound, 48 pp. The price is $2.00 to members of CRAFTS. The price list can be ordered from:

Alexander Farnham
Box 365, R. D. 2
Stockton, N.J. 08559

THE MUSEUM OF EARLY TRADES AND CRAFTS

As most of our members know, it was just over ten years ago that the Museum of Early Trades and Crafts was founded in Madison, N.J., the result of the dream and dedication of Edgar Law Land.

In the intervening years the Museum has grown rapidly. Today it possesses the largest and most comprehensive collection of tools in the state. Known not only for its collection and for the quality of its presentations, but also for the warm welcome and special attention given to everyone who visits, it has become one of the most popular museums in the state. It is open 360 days a year.

As a non-profit, educational institution, the Museum of Early Trades and Crafts has existed through annual membership contributions, both public and private. Now, as a hedge against inflation, it is conducting a Tenth Anniversary Endowment Fund Drive.

A tax-deductible contribution to the Endowment Fund now would help to insure the Museum's presentation of our heritage for future generations.

The address is: Museum of Early Trades and Crafts, Main Street at Green Village Road, Madison, N.J. 07940.

(Fisher & Norris, cont'd from page 4)
the Rensselaer Polytechnic Institute of Troy, from which he graduated as civil engineer in 1859. He served thirteen years in the United States Navy, and at the time of his father's death he had become Chief Engineer. He resigned from the navy to assume charge of this business. He is a prominent member of the American Society of Civil Engineers, member of the Loyal Legion and of the G.A.R. of Philadelphia.....
Mr. Fisher is a man who stands well in the social and commercial circles of New Jersey, and is highly esteemed for his uncompromising integrity and unimpeachable veracity.

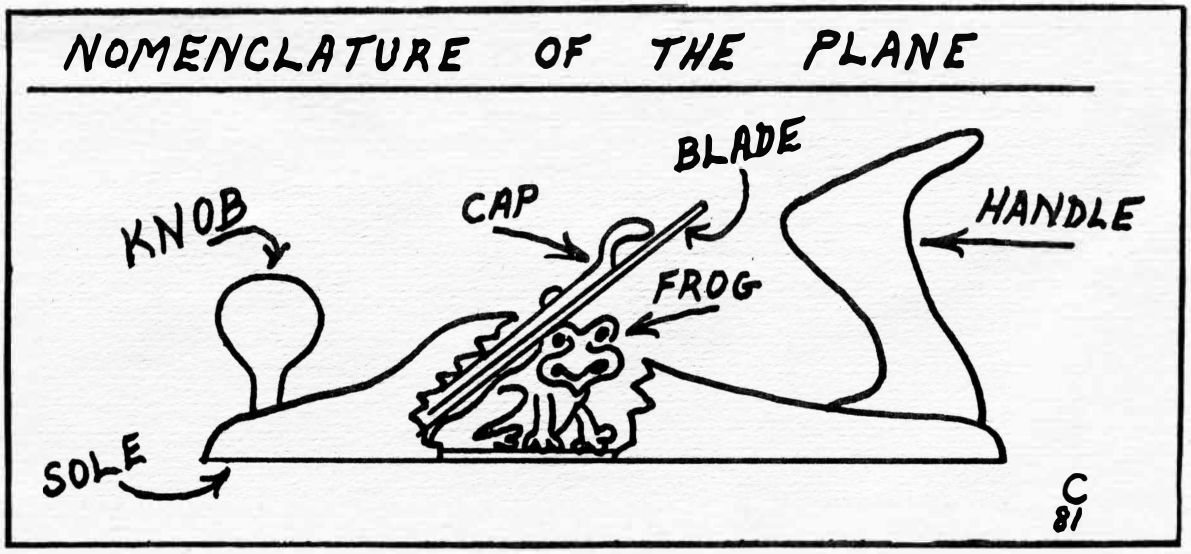
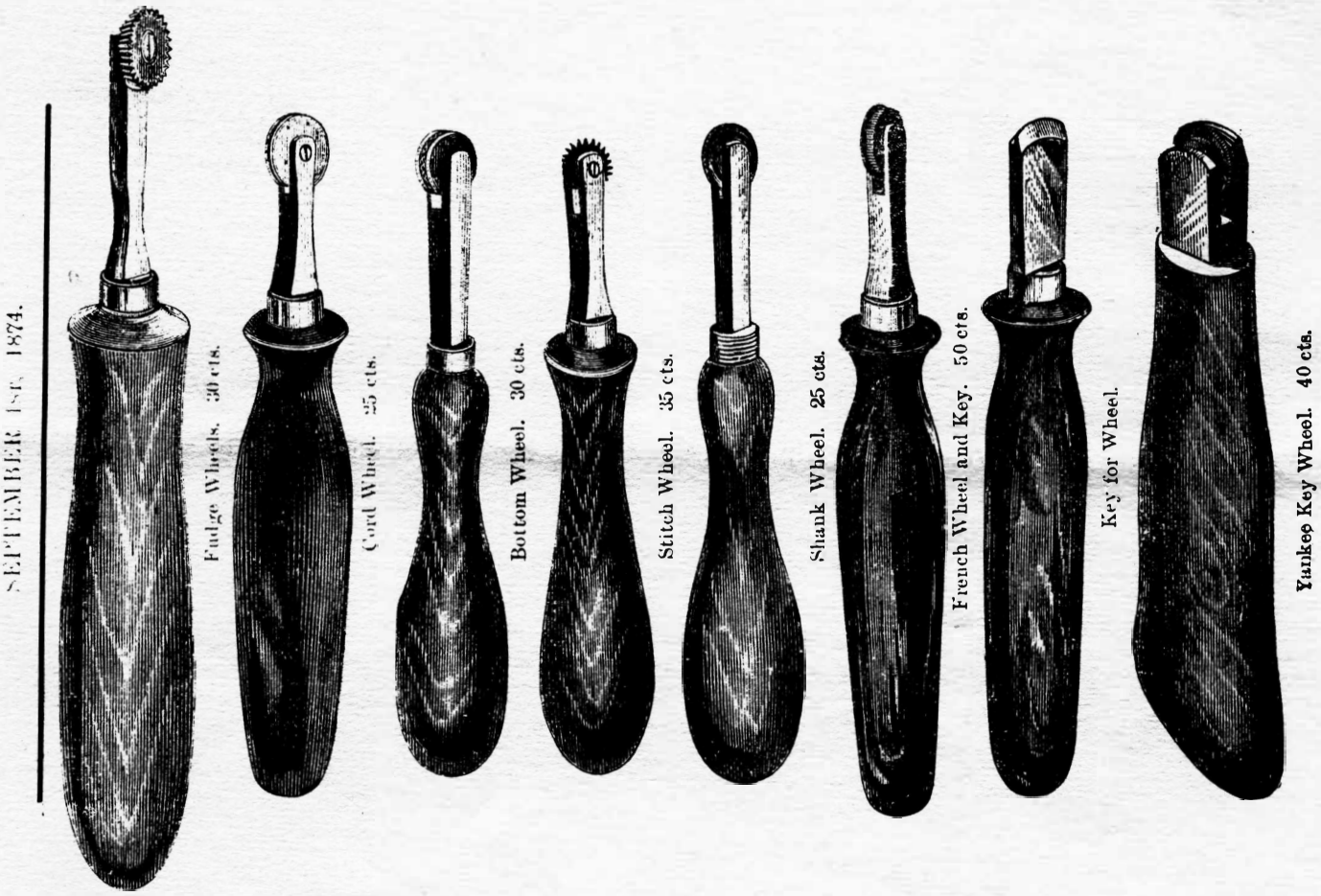
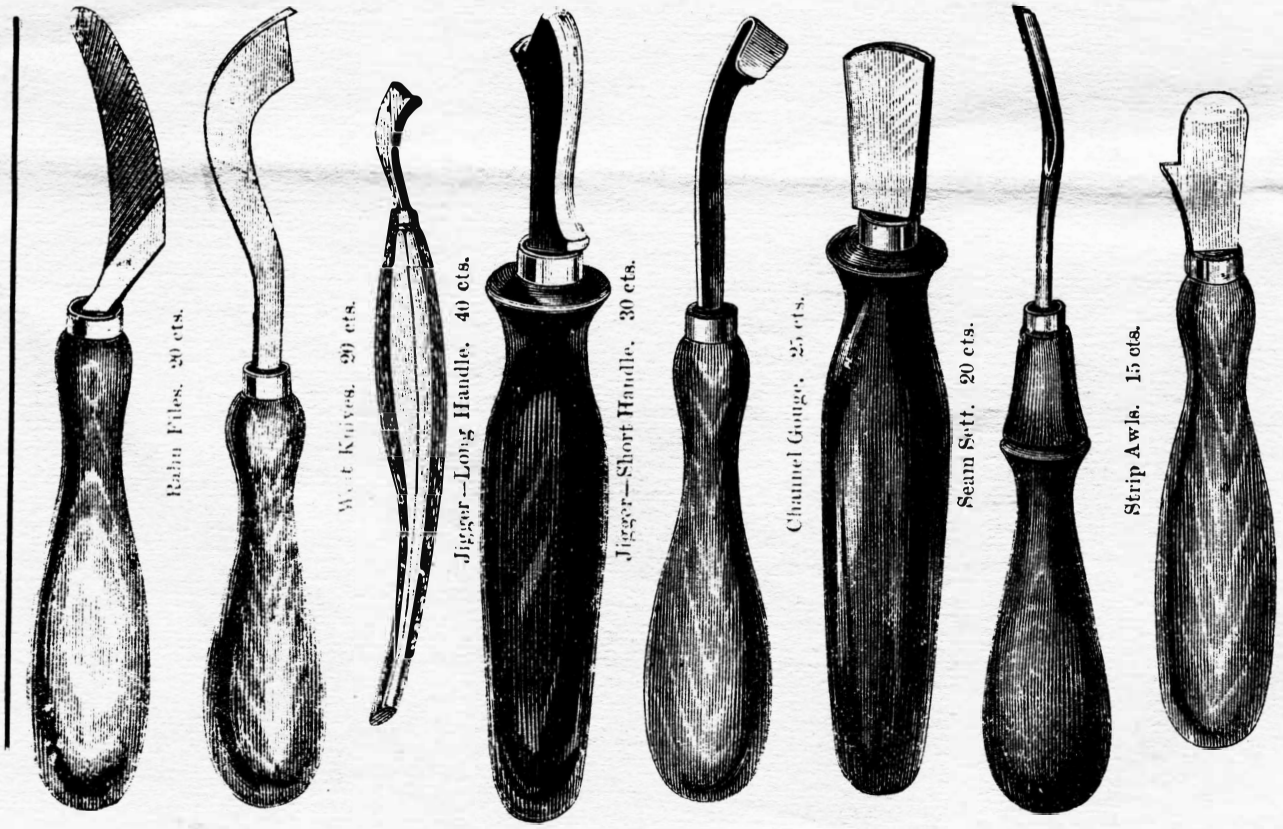
NEW MEMBERSHIP YEAR BEGINS

The 1981-1982 membership year for CRAFTS of New Jersey began on July 1st.

Every year about this time our Treasurer, Carroll Palmer, begins to worry about those members who are late paying their dues.

If you are one of the guilty ones, help contibute to Carroll's peace of mind. Send your $5.00 to:

C. Carroll Palmer
725 Pemberton Avenue
Plainfield, NJ 07060



From the Henry Arthur 1874 price list of leather and findings, published by Alexander Farnham, Stockton, N. J.