Right . . . from the beginning

Traveling back along the course of the great brass industry's history . . . like following a broad river into the hills from which its tributary streams descend . . . it is easy to become pleasantly lost in forests of shadowy legends and interlacing personal records.

Many who journeyed in search of the true origin of Scovill Manufacturing Company have returned with only vague pictures of its roots, so carefully and deeply were they planted by Abel Porter and his partners. These Connecticut Yankees who laid the foundations of Scovill in Waterbury were pictured as *successful,* but the many blank pages in their history have challenged other travelers to make them *famous.*

Now, a new and penetrating research shows them to have been men of imagination as well as industry, who knew where they were going and who, through all of their traceable activities, directed the flow of their enterprise toward well-planned objectives.

Abel Porter and his partners were, first of all, hard-working craftsmen. They achieved proficiency and success in the metal-working and button-making trades of their time. They pooled their personal skills and fortunes with sound business judgment to pioneer against great odds in the establishment of the brass industry in America. Through wisely selected successors, we can trace an undeviating adherence to ideals of craftsmanship, enterprise, and forward-looking management which continue to guide Scovill destiny.

Abel Porter was the kind of man who might well have said with his practical and hard-bitten contemporary, David Crockett, "Be always sure you're right—then go ahead." Passing time has changed this atmosphere very little on the banks of Waterbury's Mad River.

Abel Porter

Pioneer

Abel Porter, Connecticut Yankee, emerges from the records of his life and work as a man blessed with energy, determination and good business judgment.

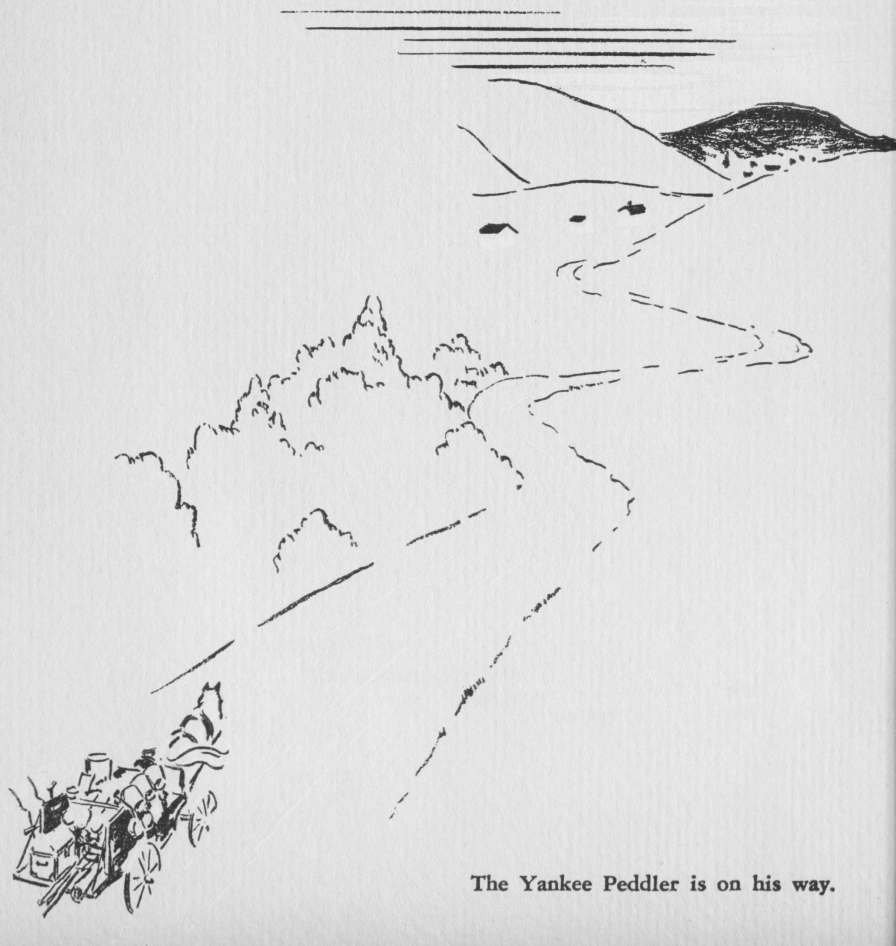
Born in 1757 in Kensington (now Berlin), Connecticut, he and his younger brother, Levi Goodwin, were sons of Gideon and Huldah Porter, descendants of an old Haddam family . . . Yankees from 'way back. Abel lived to the mellow old age of 93 . . . his brother, 84.

What more fitting than that Abel, after two enlistments under General Washington, should settle down to the "tinner" trade in Southington, near the place of his birth and in the very heart of the countryside whose famous tinsmiths were sending their wares far and wide on the backs, and in the wagons, of "Yankee Peddlers"! He learned metal-working from Solomon Dunham, Tinner, the father of his first wife, Elizabeth, who died in 1783. Another relative was William Pattison, credited, with his brother, with having started the manufacture of tinware (household cooking and eating utensils) in this country at Berlin, Connecticut, in 1740.

Abel Porter's house in Southington.

In 1784, after the death of his first wife, Abel married Hannah Eliot, a direct descendant of John Eliot, famous "Apostle to the Indians." He bought, in 1795, the "House and Shop" located at the intersection of Main Street and Meriden Avenue in Southington on the site of the present public library, where he lived and worked until moving to Waterbury.

After 1795, with some capital at his command and with the demand for his tinware increasing from customers of door-to-door peddlers, his business in Southington evidently grew to considerable proportions. The Federal Census of 1800 shows that four or five males up to 26 years old were residents in



The Yankee Peddler is on his way.

Abel Porter's household. Since they cannot be accounted for as members of his immediate family, we may reasonably assume that they were apprentices in his "tinner" shop in accordance with the established custom of that day. In any case, "Abel Porter & Company of Southington," as distinct from his Waterbury partnership, is referred to in the 1804 Waterbury button shop purchase agreement, just prior to the time when he sold his business interests in Southington.

The interesting point of these findings is that Abel Porter, at the time arrangements were started to transfer his activities to Waterbury in 1802, was by no means an inexperienced young man setting out with his brother to seek their fortune, but was already an established and successful businessman, 45 years of age and the head of his own Southington "factory." He was, no doubt, familiar with the techniques of metal-working in his day . . . and this would have included, in addition to the "tinner" trade, a sound knowledge of pewter and block tin casting as it was carried on in several small shops in the neighboring towns of Meriden, Cheshire and Waterbury. In addition, apparently he did some experimental work in hand-stamping from imported or scrap brass and copper strip metal.

Abel Porter first began to acquire interests and contacts in Waterbury between 1798 and 1800. He bought several pieces of Eliot family land in the town during that period, and it was probably through these transactions that he met his future partners and became interested in the possibilities of a Waterbury development.

One of these men, well-to-do Daniel Clark, was active in real estate dealings at the time, and his transactions suggest that the Porter brothers' move to Waterbury was based on a plan carefully worked out over a period of months or even years before its final accomplishment.

At about this time, the manufacture of metal buttons was becoming an increasingly important industry in Waterbury and its environs. Along with the development of improved methods for making and finishing comparatively cheap cast or stamped buttons, the market became broader. Where previously buttons of brass or silver were either imported or made to order for a very limited custom trade, Connecticut button makers were now engaged in one of the first efforts of an American industry to produce a quality product to sell to the general public at a reasonable price.

It is a tribute to Abel Porter's foresight that he seems to have recognized the opportunity and to have reasoned that he might profitably apply his metal-working experience, tools, equipment, and available capital to the establishment in Waterbury of a company to develop intensively the metal button industry. When, in the summer of 1802, he and his brother, Levi, held their preliminary discussions with Silas Grilley and Daniel Clark, each could show valuable potential contributions to their successful partnership.

The Porters could bring capital, tools, and equipment from their operating Southington "tinner" shop, as well as experience

The original Mill on Mad River.

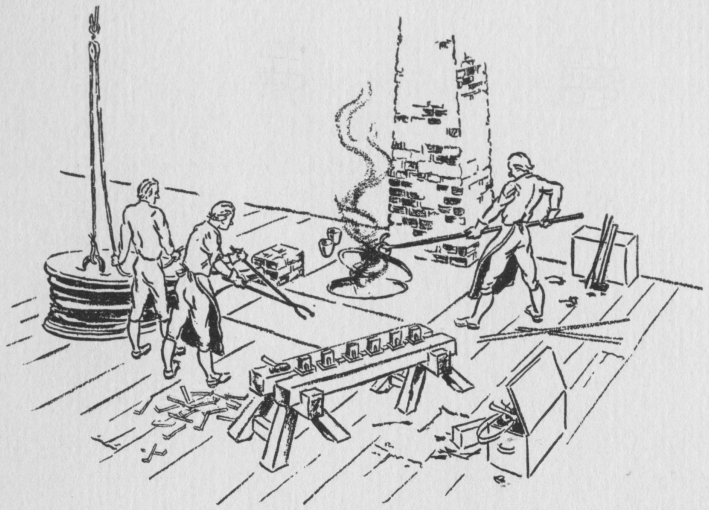
with the metals ultimately to displace tin and pewter as materials for metal button making. Silas Grilley helped to originate a successful type of wire-eye pewter button, already produced by him and his two brothers. The fourth original partner was Daniel Clark . . . through whose significant family connections it was possible for the partners later to acquire the essential water-powered Hopkins Grist Mill on Mad River.

Probably David Hayden of Attleboro, Massachusetts, reputed to be an experienced all-round button maker, was strongly urged to come to Waterbury and join with the four partners at this time, although he did not actually arrive until late in 1804.

The timing of the project was practically perfect, as we see it now. It was not long before metal-button making advanced from the simple low-temperature casting of "soft" tin and pewter alloys to the much more difficult casting or stamping of "hard" buttons, made from various types of scrap brass or copper that button makers were able to collect. Such scrap metals were obtained from old stills, kettles, sugar boilers, ship sheathing, and the like.

Abel Porter may well have contributed the necessary know-how to achieve the much higher temperatures called for in processing these "hard" metals. He is credited by no less an authority than his son-in-law, "Deacon" Aaron Benedict, with having been "the first gilt button maker in the United States" . . . the gold being applied to either "soft" or "hard" metals. It is evident that even in the earliest years, Abel Porter and his partners had the necessary elements of vision, capital and experience, as well as an active customer demand, to spur them on in their button making venture.

From this beginning in gilt button fabrication, we shall follow the history of Scovill, with emphasis on the highlights of its 150 years of pioneer development in the field of cold-rolled brass strip.



Primitive pit fire for brass melting.

We Start Casting and Rolling

When Abel Porter & Company opened its doors for business in Waterbury, it was in a small shop located at what is now Nos. 355-359 South Main Street, almost within sight of the present Scovill offices. In the earliest days of the new firm, the main product was undoubtedly pewter or other high tin alloy buttons as developed by Abel Porter and the Grilleys. It is certain, however, that the four partners and their eight or nine employees, shortly after their organization, began actively to cut or stamp "hard" buttons from brass and copper scrap, and that they also succeeded in raising the heat of their pit fires high enough to melt scrap brass alloys and cast "hard" buttons therefrom in individual button molds. The fire-gilding process was used for applying gold to their metal buttons.

From early experiments by Abel Porter & Company to determine the "best" metal for button making, the conclusion must soon have been reached that cold-rolled brass strip was ideal

for the purpose. However, no such domestic material was then procurable, except in scrap form which was uncertain as to composition, thickness, temper and availability.

Consequently, during early developmental years, the partners were no doubt forced to consider the possibility of casting and cold-rolling their own brass strip. Such a program, however, presented plenty of problems. Alloying copper with zinc to produce brass bars in a process based upon that invented by James Emerson in England in 1781 required much greater heat applied for a longer time than the usual tinners' charcoal fires could supply. Casting brass bars rather than buttons called for new types of molds. Cold-rolling of such bars necessitated the application of considerable power.

Many historians of the brass industry have placed the first casting of brass in America in Abel Porter & Company's shop soon after the business was started. Now we know that the first successful brass bar castings used for subsequent cold-rolling into strip were produced in this shop sometime between 1806 and 1809.

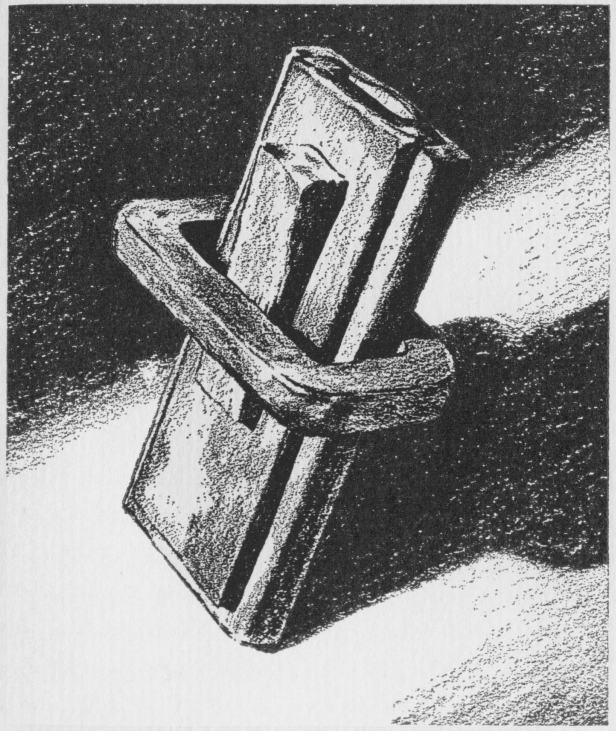
The first problem to be solved was the development of a suitable forced draft for charcoal pit fires, and there is no doubt that Abel Porter & Company did have such facilities in operation at its South Main Street shop. Whether bellows were operated by boy-power, man-power or horse-power, we can only guess.

The brass was melted in small crucibles probably holding no more than 5 to 10 lbs. per charge. It was poured into little band-and-wedge type cast iron molds (cavity dimensions were 7-1/2" x 1-1/2" x 5/16"), each producing a bar or slab of metal approximately 1 lb. in weight after removal of the gate end. Except for size, the basic design of such molds established the general pattern used even in present-day brass casting shops. One of these original molds is still in the possession

of Scovill Manufacturing Company. Entirely successful brass castings have been made in it recently.

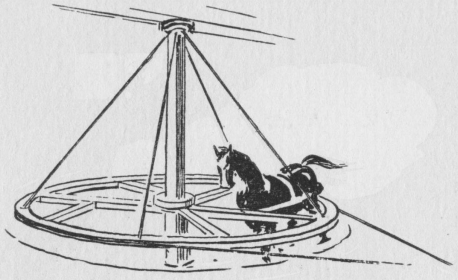
Having once developed the means for casting brass bars on a practical commercial scale, the next problem that faced Abel Porter & Company was that of reducing the bars to usable strip form for button fabrication.

Then, as now, this called for cold-rolling and involved the application of a great deal of power. To these pioneer brass casters it must have seemed like a tough problem indeed. They had no water-powered mill . . . no standard rolling machinery was available in America. However, it has long been a legend in Scovill and brass industry history that Abel Porter



Original 1-lb. capacity band-and-wedge mold.

& Company did have at their shop a "two-inch" set of finishing rolls operated by a horse. While recent detailed research has failed to produce any substantial evidence in support of this legend, it is entirely possible that such equipment was in operation. "Power units" based on the energies of a faithful dobbin walking around in a circle and driving a wheel geared to machinery of one kind or another were common enough at the time. Small rolls could have been driven by this simple means.



When h.p. was horsepower.

The more credible story is that the rolling problem was solved by simply piling the finished cast bars into a cart and driving them to the water-powered "Iron Slitting and Rolling Mill" operated by Frederick Wolcott & Company at Bantam Falls (then Bradleyville) near Litchfield, 20 miles away. The trip took a full day each way, and it was the practice for the lucky cart driver to "stay over" while the rolling was completed.

In piecing together available records, especially invoices for rolling from the Wolcott Mill, it seems probable that at least a very substantial portion of Abel Porter & Company's finish rolling, as well as all breakdown rolling, was done at Bradleyville until Waterbury's Mad River water-power facilities were converted to casting and rolling uses. This work was not completed until about 1815.

By the time Abel Porter & Company had concluded purchase of the former Hopkins Grist Mill in September, 1808, ownership of the firm was already in the process of change. Levi Porter had transferred his share to David Hayden in late 1807. Then Silas Grilley sold his one-fourth interest in August, 1809. In September, 1811, through transactions recorded on two successive days, Abel Porter first bought out his remaining partners, Daniel Clark and David Hayden . . . then sold the entire properties to Frederick Leavenworth, James Scovill, and the latter's son, James Mitchell Lamson Scovill.

And what happened to Abel Porter? In 1818 he bought two farms in Paris, Oneida County, New York, where he retired at 61 to spend the rest of his days as a gentleman farmer.

Thus the firm of Leavenworth and Scovill was formed, the partners being essentially Frederick Leavenworth and J. M. L. Scovill . . . James Scovill evidently being in the picture primarily to aid his 22-year-old son, to whom he sold his interest in the firm two years later. David Hayden continued as an employee until he was taken in as a full one-third partner with Leavenworth and Scovill in 1814.

The new partnership was a most fortunate combination of the outstanding sales and leadership abilities of J. M. L. Scovill with the technical and manufacturing skills of Frederick Leavenworth and David Hayden.

The original South Main Street button shop, gilding shop, and casting shop operations were transferred about 1812 to the Mad River Grist Mill site. The casting shop became the "Mill House," where brass bar casting was continued, with water-power driven bellows forcing the draft through charcoal pit fires. Cold-rolling was started as soon as delivery and installation of a set of 4″ x 4″ rolls was effected between 1814 and 1815. Naturally, the 7½ h.p. generated by the old overshot grist mill water wheel was expanded to take care of the extra loads put upon it.

Right . . . so we go ahead

The vision and enterprise of Abel Porter and his partners firmly established them in the history of the brass industry of America. They manufactured the first gilt buttons in this country . . . they learned, through trial and error, that brass strip was the ideal material for making such buttons . . . and they were the first in America to cast brass bars for cold-rolling.

Inspired by the example set by its pioneering forebears, the firm of Leavenworth, Hayden & Scovill continued to improve methods and increase production, constantly aware of the rapidly growing demand for more and better brass and brass products.

The War of 1812 was the springboard which gave great impetus to the establishment in Connecticut of diverse light-metal fabricating shops along many of the streams and rivers providing natural water-power. Around Waterbury, old-time household crafts were being displaced by small "mechanized" factories where lamps, clocks, brass hinges and door knobs, kettles, hollow-ware, thimbles, novelties, and the like were made. Such items were added to the line of tinware products sold from door to door by the "Yankee Peddler," who continued his trade until the Civil War.

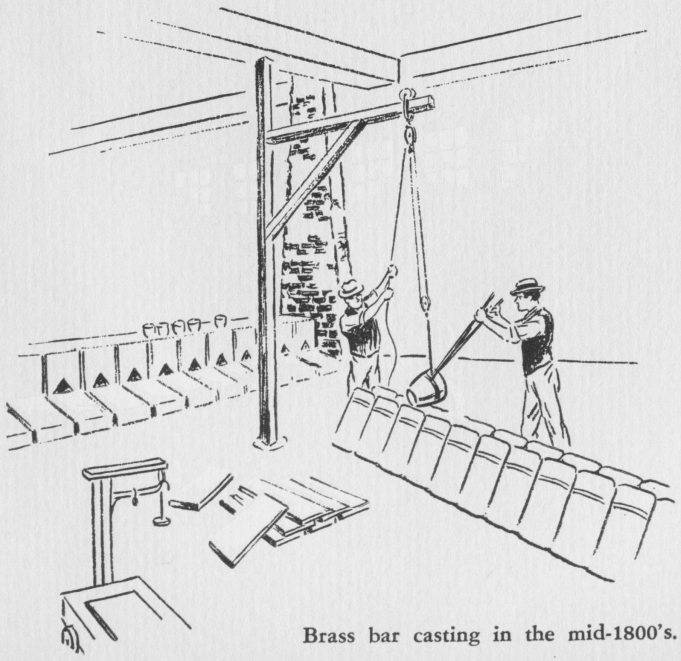
The tiny 1-lb. coils of brass strip only 1½" wide, used originally for making brass buttons, were obviously too small for fabricating such items as brass kettles, hardware and lamps. How were the new owners of the mill on Mad River to increase the needed width and length of their strip brass coils, and still retain metal soundness throughout?

The domestic founders of cast iron rolls were having great difficulty at that time in producing sound roll castings . . . and with existing English restrictions on exporting rolls and skilled workmen, we find Leavenworth, Hayden & Scovill eagerly and

constantly pushing roll makers for larger and stronger rolls, and doing everything possible to learn more about the secrets of English brass-making methods.

By 1816 an 8" set of rolls somehow came into their possession and with this acquisition it was, of course, possible to roll a wider cast bar . . . however, casting porosity frequently appeared because the all-important bar width and thickness relationship was not fully appreciated until later.

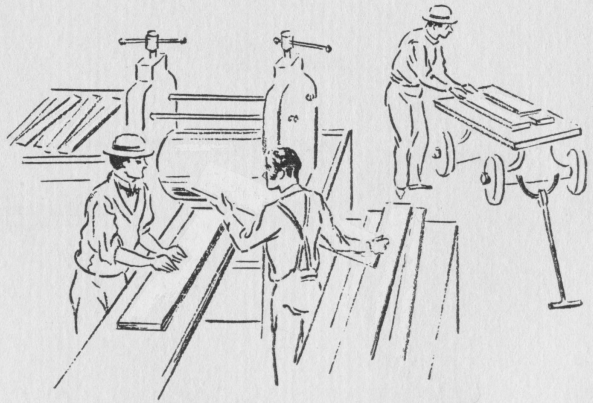
Fortunately, the partners were able to interest James Croft in joining forces with them in 1821. He was an experienced English metal-worker and tool-maker who had come to this country a few years before. Even his year or two of work with the firm brought about a noticeable change and improvement in casting and rolling techniques. He was sent back to England to buy what tools and equipment he could, to induce other skilled metal workers to come to Waterbury, and to pry out as many English brass-making secrets as possible. Croft



Brass bar casting in the mid-1800's.

checked with an expert Birmingham caster, and wrote on June 26, 1821, to Leavenworth, Hayden & Scovill: "It is his decided opinion that you cannot cast metal sound by your method and another evil, your ingots (bars) are too small—there would be a greater certainty of soundness were they three times as wide . . . the metal should be poured at a very certain heat and the quicker it can cool, the better . . ."

Apparently this advice was followed, because when Jonathan Judd, eagle-eyed traveler, visited Scovill on August 22, 1836, his diary records: "The melted red-hot liquid was turned into molds, making narrow plates (bars) say 15 or 18 inches long, 4 to 6 wide, and 1/2 or 3/4 of an inch in thickness. These plates are then rolled down to the proper thickness . . . between cylinders which are nearly a foot in diameter." From the stand-



Brass bar rolling in the mid-1800's.

point of weight of brass bars cast, this description indicates that they averaged about 25 lbs. each.

In April, 1827, William Henry Scovill, younger brother of J. M. L. Scovill, replaced Frederick Leavenworth and David Hayden in the firm of Leavenworth, Hayden & Scovill. The company name then became J. M. L. & W. H. Scovill, and it

so existed until January 30, 1850. On that date, this partnership and other affiliated interests of the two brothers were merged into Scovill Manufacturing Company which, from that time onward, has continued its uninterrupted existence. J. M. L. Scovill continued to contribute his exceptional skill and energy in what we today call sales management, while William seems to have been equally astute and capable in supervising production.

At the time Scovill Manufacturing Company was formed in 1850, the population of Waterbury had grown to approximately 5,000 persons from the 3,000 or so when Abel Porter & Company was operating. The middle of the 19th century brought several significant additions to the Waterbury scene . . . the first local bank was chartered in 1848, the railroad came up

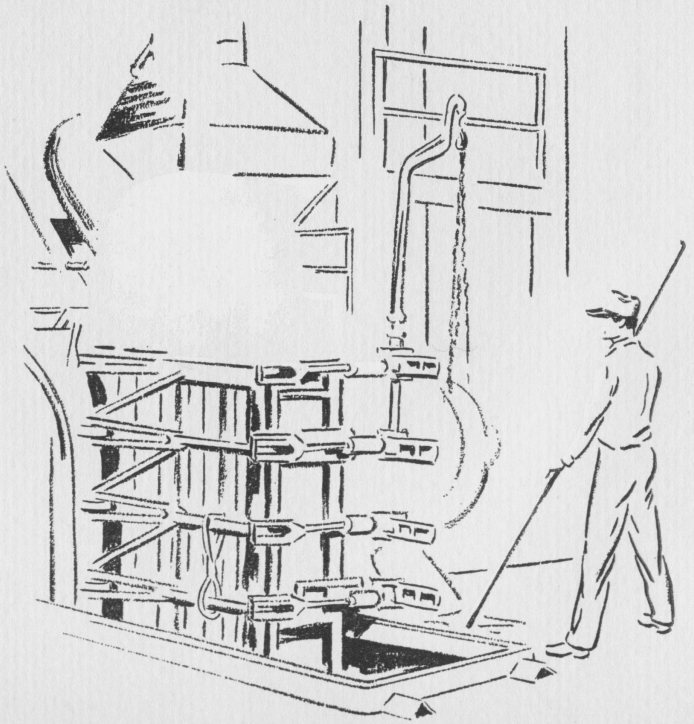
"Mill House" as seen by Jonathan Judd in 1836.

through the Naugatuck Valley in 1849, and a well-rounded machine shop was started in 1851.

The seeds for successful and large-scale industrial growth in Waterbury were planted by then, and against this background we can trace rapidly, in broad outline, Scovill's further development of brass casting and cold-rolling.

Generally speaking, brass strip production consists first of melting copper and zinc in varying proportions . . . then pouring the molten alloy into molds of required cast bar size. After cooling, the resultant castings are given a series of "passes" through the rolls, with intermediate anneals between roll sequences, until the finish thickness or gauge is reached. Brass hardens as it is cold-worked by rolling, drawing, forging or other mechanical operations which compress the metal . . .

Conventional bar casting today.



annealing, of course, results in softening the brass to permit further processing.

Primitive charcoal pit fires for brass melting, with groaning bellows forcing the draft, were gradually superseded after 1830 by anthracite coal which was then beginning to be used as fuel. It was burned in a similar type of pit which was tied into the distinctive 19th century high brick chimney to create a proper draft effect. Scovill, after several years of pioneer development work, started using oil-fired melting furnaces about 1915. Shortly after the first World War, a contact resistance furnace was developed by the late Morris Bennett, and it proved especially adaptable to the melting of alloys containing high percentages of copper or nickel. A few years later, when high temperature furnace linings became practical, Scovill started to standardize on the present-day type of Ajax induction furnaces.

We have seen the original little 1-lb. capacity band-and-wedge mold grow into the 25-lb. size by 1836. As melting and pouring techniques improved, along with the ability of rolling equipment to handle larger bars, the nominal size of castings increased to 50, then to 100 and 200 lbs., depending on their width. Modifications of band-and-wedge molds included Scovill's own "book" type, developed about 1910, with multiple individual compartments. These are still used today for casting certain alloys. Except for the water-cooled type developed in Europe during World War I, bar casting molds were generally made of cast iron. It was not until Scovill's revolutionary flat-metal continuous casting process became an actuality that chrome-plated copper molds reached their present level of high efficiency.

The old-time brass caster was king of all he surveyed. His alone was the knowledge of just what proportions of copper and zinc or other elements, in virgin metal or scrap forms, were to be put in his furnaces. His was the trained eye that judged heat intensity and proper pouring time. He alone con-

tracted with his employer, hired his own helpers, and handled his casting team as he saw fit. It was not until the start of World War I that metallurgical controls and production supervision were fully established in the casting shop.

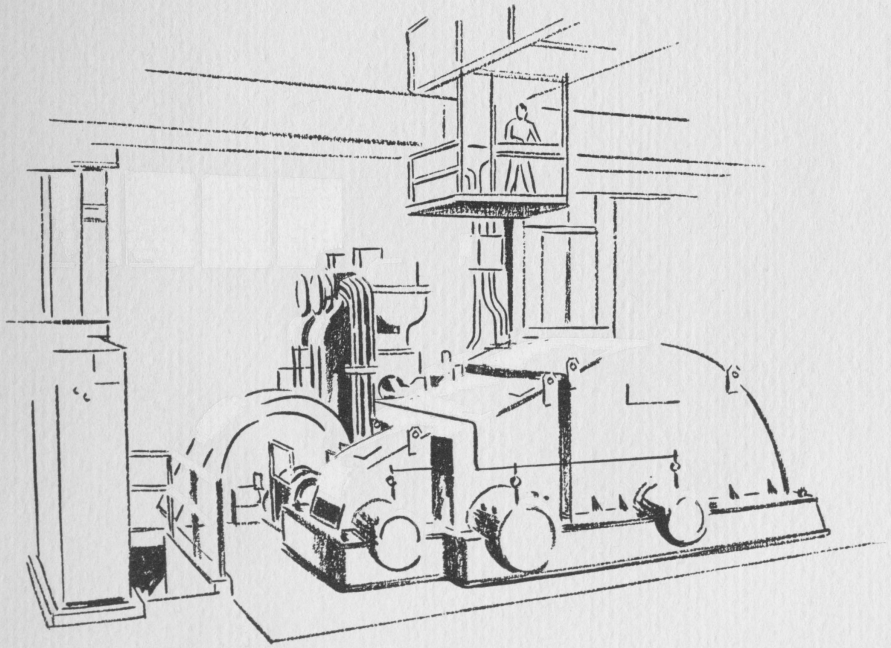
Early difficulties in obtaining sound rolls were apparently overcome by 1836, because two pairs of rolls were ordered in January of that year . . . one 9″ x 15″, the other 16″ x 24″. Even today, conventional 2-Hi rolling equipment includes sizes only slightly larger . . . 16″ x 30″ and 20″ x 36″. The earliest rolls were made of cast iron with a chilled exterior surface. As larger cast bars were rolled with greater "pinches" or reductions taken, it was soon found necessary to go to alloyed cast iron. As rolling speeds continued to increase from the snail's pace of Grist Mill days, cast steel became standard, culminating with the forged steel rolls of today. Since the stress and shock of rolling is taken up largely by the roll bearings, we find that bearing materials have developed from babbit metal . . . to bronze . . . to fibre . . . and currently to anti-friction types.

From time to time, interruptions in brass rolling were experienced when water-power failed during dry summer months. Finally, in 1852, Scovill's first steam engine was installed, picturesquely known as the 125-h.p. "Sally Ann." With her 16-foot diameter flywheel humming around at 26 r.p.m., she did yeoman service for about 30 years.

A book in itself could be written on the development of Scovill power facilities, periodically augmented to satisfy the rolling mill's continual hunger for more and more power. Successive moves from the old "South Mill" located at the site of the original Mad River Grist Mill, to the "North Mill" a few hundred feet away, and finally to the great new Continuous Strip Mill "out East" are tied in with a century and a half of power changes . . . first water-power . . . then steam . . . and

finally present-day all-electric drives. The head of water at the original Mad River Dam could generate only a top of 50 h.p. from an overshot water wheel . . . and so in 1839 began a long series of water-power changes involving building upstream lakes, flumes, conduits and canals which powered not only overshot but also breast water wheels and turbines.

As rolling speeds increased over the years, and heavier and heavier reductions became possible, it was found that a large volume of water was also necessary to cool the rolls . . . thus overcoming extreme end-to-end variations in thickness of the strip. The Mad River again came to the rescue and supplied the needed cooling water, as well as power for a good share of the rolling. As greater and greater quantities of water were used, the present Scovill system of six large supply reservoirs was gradually developed.

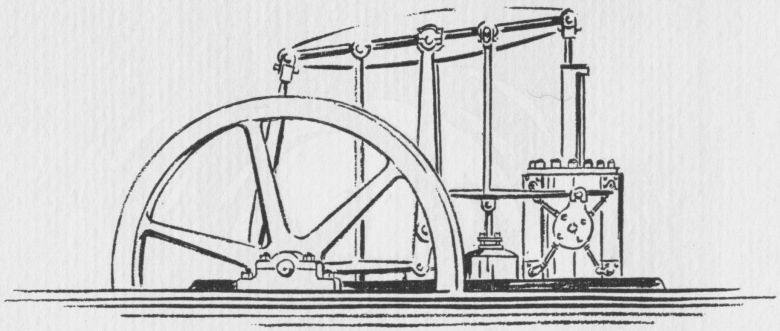


2,000 h.p. electric drive on 2-Hi breakdown mill.

Furthermore, as lengths of strip became longer and longer, it became imperative that some mechanical means be developed to coil the brass as it came from the rolls. In 1886, hand blocking on a winder came in, and by 1905 the automatic mechanical blocker was added. The main skill of the old brass roller was his ability to impart proper shape or "track" in the rolls by "stick grinding." This operation aided materially in holding strip thickness variations from side to side to a minimum, as well as affording a close control over flatness and straightness.

It is interesting to note that by 1850 Scovill rollers were so accurate in producing uniform dimensions in their brass that sets of Scovill strip samples, with sizes marked upon each, were used by other brass producers as accepted industry standards of comparison. Scovill standard strip samples remained in general industry use until 1858, when Brown & Sharpe gauges began to gain universal acceptance in the metal-working trades.

Annealing of brass between rolling sequences and at the important finish anneal has run the gamut from hardwood-fired muffles to hard coal, to oil, to coal gas, and now to propane gas in efforts to obtain as close a control as possible over basic factors of annealing time and temperature.



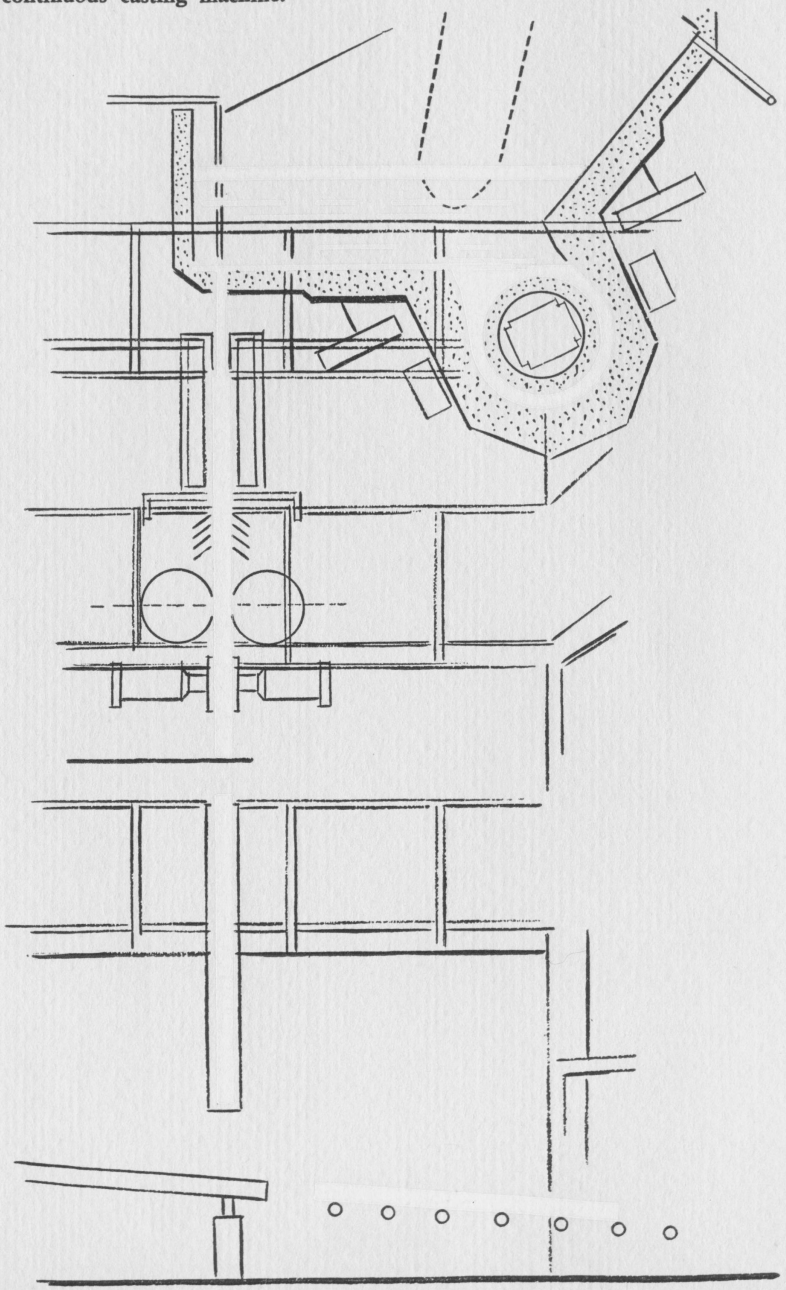
"SALLY ANN"

The relationship between strip output and nominal installed water, steam, and electric power in various years is high-spotted below. This chart pertains *only* to Scovill rolling mill operations.

YEAR	OUTPUT IN POUNDS	NOMINAL INSTALLED HORSEPOWER		
		WATER	STEAM	ELECTRIC
1815	3,000 (Est.)	20 (Est.)	—	—
1831	15,000 (Est.)	50 (Est.)	—	—
1850	369,000 (Est.)	150	—	—
1860	663,000	150	125 (Standby)	—
1872	1,704,000	300	125 (Standby)	—
1882	3,267,000	300	150	—
1892	8,757,000	200	700	—
1902	16,005,000	—	1,700	—
1922	27,826,000	—	—	3,500
1952	100,000,000*	—	—	12,000

* Normal peacetime capacity only

Simplified drawing of Scovill's flat-metal continuous casting machine.



Better By The Mile

Light-metal fabricating has grown during the past 150 years through an era of constantly accelerating changes . . . new processes and products following closely one upon another. Abel Porter and his partners would be utterly confounded, could they but see a typical strip cut-up shop today. As ultimate users of articles made from brass have demanded more and better products, and as fabricating operations have become faster and more complex, brass strip has been required to meet closer specifications. *Brass has met the challenge,* and its almost universal application attests to its being the ideal material, just as it was when Abel Porter & Company was making gilt brass buttons at the start of the 19th century.

From the birth of nickel-silver alloys in the 1830's, in addition to previously produced copper-zinc alloys, we see emerging over the years the development of brasses containing lead, tin, nickel, aluminum, and other elements . . . all in a multiplicity of compositions designed for specific uses. Tonnage-wise, the copper-zinc series of brass strip alloys, originally produced by Abel Porter & Company, is still of paramount importance. Today this series includes such alloys as: Gilding, 95%—Commercial Bronze, 90%—Red Brass, 85%—Low Brass, 80%—and Cartridge Brass, 70%. These alloys are continuous-cast in Scovill's unique flat-metal Continuous Casting Machine which, together with its integrated Continuous Strip Mill, went into commercial production late in 1949.

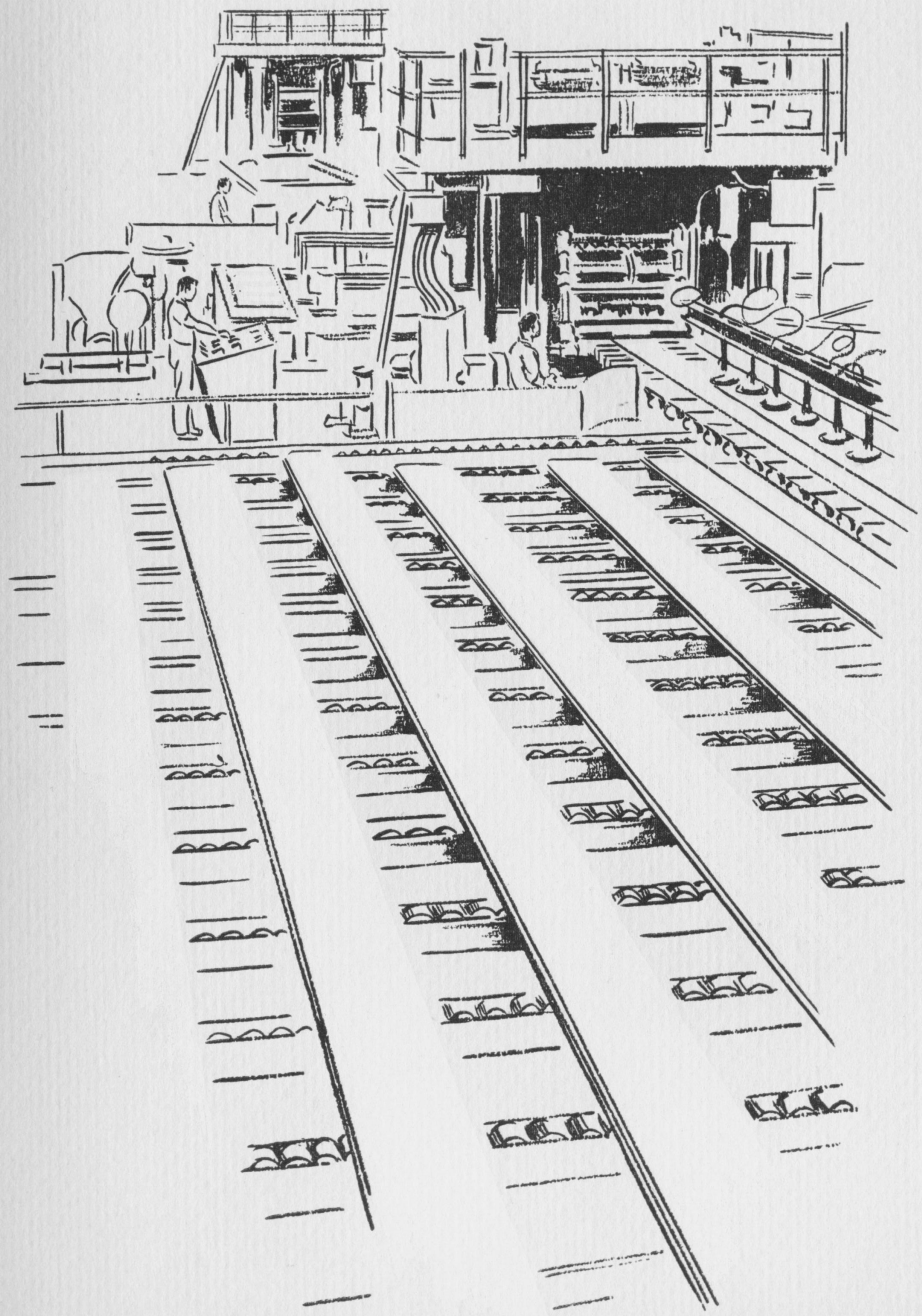
Rolling in giant 4-Hi mills at surface speeds of around 1,000 feet per minute, huge brass coils weighing about 2,000 lbs. each are in regular production. Even this achievement does not fully meet present-day demands from many light-metal fabricators for heavier and longer coils . . . and now new production equipment is being installed in Scovill's Continu-

ous Strip Mill to process coils weighing up to 3,000 lbs. each. This means that brass strip in thin gauges can be delivered in *coils a mile long* without welded joints . . . and with assurance of inherent soundness and closely controlled uniformity in chemical composition, dimensions and physical properties.

* * * * *

Today, when we look back over 150 years, we see very clearly the pattern of achievement. No sacrifice in time or work was too great for the brass pioneers to make. Men were always ready to come forward and confidently venture their capital and energy in a promising industry. There was a readiness to try new methods and equipment, and a willingness to dispense with the old as soon as the new proved its value.

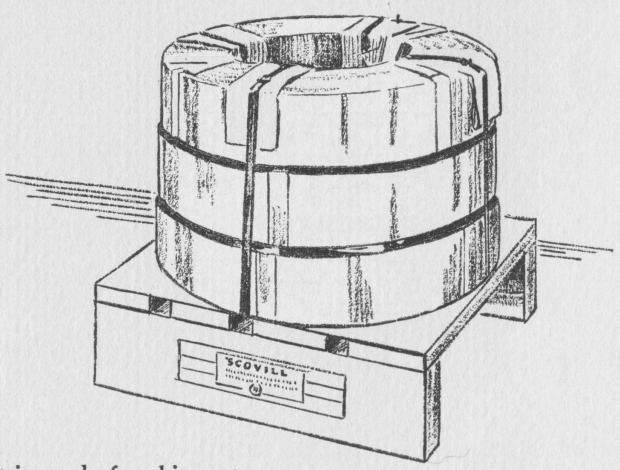
We continue our work in the spirit of the pioneers . . . "Be always sure you're right—then go ahead."



Entry side of 4-Hi rolling mill.

The of One Hundred and Fifty Pioneering Years

Scovill history, from gilt button-making in the early 1800's to the present, records a constant striving to produce more and better brass. What we believe to be the world's finest



Brass strip ready for shipment.

brass cold-rolling mill exists for only one purpose . . . to bring you THE BEST BRASS STRIP YOU CAN BUY, with these specific *continuous-cast* alloy advantages:

Coils for long, non-stop runs on your machines.

Clean, smooth surfaces.

Minimum variations in all dimensions.

Uniformity of chemical composition and temper from strip to strip throughout each unit length.

Freedom from internal or mechanical defects, due to processing from highest quality continuous-cast bars.

Accurately controlled annealed and cold-rolled tempers, including close grain size limits.

Modern packaging methods to suit your materials-handling facilities.

Rapid mill deliveries resulting from fast production cycles.

"You can't buy better Brass"

Significant Dates In Early Scovill History

May 7, 1795 —Abel Porter buys House and Shop in Southington, and his "Tinner" metal-working business founded as Abel Porter & Company (located on what is now site of Southington Public Library at 239 Main St.).

September 7, 1802—Arrangements started for acquisition of land in Waterbury for Button Shop (located opposite point where Meadow Street now intersects South Main Street).

May 15, 1804 —Abel Porter & Company buys building for Button Shop and starts transferring operations from Southington to Waterbury shortly thereafter.

December 28, 1804—David Hayden buys house in Waterbury.

June 9, 1807 —Abel Porter & Company buys 1/2 interest in Mad River Grist Mill from Benjamin Upson (Daniel Clark's step-father).

February 18, 1808—First record of David Hayden as a partner replacing Levi G. Porter in Abel Porter & Company partnership.

September 21, 1808—Abel Porter & Company buys remaining 1/2 interest in Mad River Grist Mill from Lemuel Harrison (Daniel Clark's brother-in-law).

August 11, 1809 —Silas Grilley sells 1/4 interest in Abel Porter & Company, and "Gilding and Casting Shops" identified.

September 18, 1811—Abel Porter buys out Land and Buildings interests of his remaining partners, Daniel Clark and David Hayden.

September 19, 1811—Abel Porter sells Land and Buildings of Abel Porter & Company at Grist Mill and South Main Street sites to James Scovill and Frederick Leavenworth. On this same day he also sells all personal property of the concern which he alone owned to James Mitchell Lamson Scovill and Frederick Leavenworth.

October 2, 1813 —James Scovill sells his 1/2 interest in all Land and Buildings to his son, James Mitchell Lamson Scovill.

August 4, 1814 —David Hayden admitted as a full 1/3 partner, and the firm becomes Leavenworth, Hayden & Scovill. All operations transferred to Grist Mill site after September 19, 1811, and before this date, and "Mill House" (Casting Shop and Rolling Mill) identified.

April 4, 1827 —William Henry Scovill joins his brother, J. M. L. Scovill, and replaces Frederick Leavenworth and David Hayden—the partnership becoming J. M. L. and W. H. Scovill.

January 30, 1850 —Scovill Manufacturing Company organized as a Connecticut joint stock corporation, representing a consolidation of J. M. L. and W. H. Scovill, Scovills and Buckingham, and Scovills & Co., the latter two being affiliated interests of the two Scovill brothers.

The only detail lacking in this little history is an authentic portrait of Abel Porter. If a genuine likeness of Mr. Porter ever comes to light, Scovill will be pleased to have information regarding it.

PRINTED IN U.S.A.