CONNECTICUT

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THE CONNECTICUT MAGAZINE

NUMBER V

FEBRUARY - MARCH

SERIES OF 1902-1903

An illustrated Bi-Monthly Magazine devoted to Connecticut in its various phases of History, Literature, Genealogy, Science, Art, Genius and Industry. Edited by Francis Trevelyan Miller and under the business management of Edward B. Eaton. Following is a list of contents in this edition, lavishly illustrated and ably written.

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Entered at the Post Office at Hartford, Conn., as mail matter of the second class.

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There are 173 Illustrations in this edition excelling and surpassing in number any publication from an American press during the year. Every article is one of vital interest, and is presented with a vigorous literary style. Produced by the Connecticut Magazine Company, 730 Main Street, Hartford, Connecticut.

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For a number of years Mr. Manwaring has been going through the Probate Records and files at Hartford in order to make a trustworthy compilation. The magnitude of the task can be seen when it is found that three large octavo volumes averaging six hundred pages each will be required for the digest, extending from 1635 to 1750.

It will be surprising too, to learn that as many as forty towns furnish names to these Records at Hartford, and that the names alone number over fifty thousand. What a boon this will be to the genealogist can readily be seen.

The price, \$7.00 a volume, will seem prohibitive to some, but such an undertaking justifies it.

Every reference library in the country of respectable size, should have these volumes, and every historical student would do well to place them on his shelves. If each one interested will do what he can toward publishing this great work, it will soon be issued. Mr. Manwaring will gladly receive any communications.

His address is, Charles W. Manwaring, 25 Mather Street, Hartford, Conn.

James Shepard's Monograph "John Hall."

Certainly one of the most interesting genealogical monographs is that entitled John Hall, of Wallingford, Conn., by James Shepard, Esq., of New Britain. Mr. Shepard has made a searching examination of the Hartford Town Votes and Land Records to determine, if possible, which of the two John Halls was the original settler of Hartford—John Hall, of Middletown, or John Hall, of New Haven and Wallingford.

Whether one agrees or not with Mr. Shepard's conclusion that John Hall, of New Haven and Wallingford, was the pioneer of Hartford by that name, he must admit that Mr. Shepard has presented a strong case from evidence mainly circumstantial. With the meager Records at hand, it would be hard to offer a more convincing argument. Over half of this monograph of some sixty pages is taken up with a study of the two John Halls, which will be rewarding to any genealogical student. The rest of the work is devoted to a carefully prepared genealogy of the descendants of John Hall, which can be depended upon for accuracy. Its price is \$1.00.

Florence Peltier Perry's Book, "A Japanese Garland."

Mrs. Florence Peltier Perry's very charming book of sketches, entitled "A Japanese Garland," seems to me a volume peculiarly adapted to supplementary reading and school use. It is full of instruction concerning the beautiful aspects of nature in that most artistic and interesting of countries, Japan, and is so wholesome in tone and pleasure in manner, and adaptable to the comprehension of the young, that I regard it as well-nigh an ideal book of its kind, and heartily approve of its wide use in schools.

—Richard Burton.

CONNECTICUT IN THE MANUFACTURING WORLD

DANBURY LEADS THE WORLD IN HATTING—HISTORICAL STUDY OF THE BEGINNING AND DEVELOPMENT OF A REMARKABLE INDUSTRY

BY

J. MOSS IVES

Author of "A Connecticut Battlefield in the American Revolution"

In collaboration with Edward B. Eaton, who tells the story of the Process of Manufacture and gives an entertaining description of the modern manufactories

Illustrations in the story of Process are from photographs of interior of the Hawes, Von Gal Company's factory, at Danbury, furnished by Edward Von Gal.

Danbury's industrial history is the history of hatting. There were other industries that had priority. A paper mill was established several years before the first hat shop was built and the manufacture of combs and boots and shoes was carried on quite extensively at later periods. But Danbury was predestined to become a hatting town, and its soil did not seem favorable to the growth of other industries. Hatting has had a marked influence on the life and growth of the town. When hatting has been poor it has had to suffer hard times. Then too it has made Danbury the most democratic of cities. There are few who can be called rich in the modern acceptation of the word, no one citizen having accumulated property of over half a million, and there are few who are very poor. There is a large middle class, thrifty, industrious, independent people, owning their own homes, and maintaining for years an equality that has long been one of the chief characteristics of the place.

It has often been claimed that the first hat ever made on this side of the ocean was made in Danbury. Be this as it may, during the days of the Revolution there stood a little red building at the northern edge of the village where the manufacture of hats was conducted on a small scale. How long previous to this time hats had been made in the town there is no record to determine. Zadoc Benedict was the owner of this infant industry, and he may be called the father of hatting in Danbury. In his employ were one journey-

man and two apprentices, and the output of his shop was three hats a day. The work was all done by hand, this in contrast with the factories of today equipped with modern machinery, turning out an average of two hundred and fifty dozen a day, and employing from three to five hundred operatives. Soon after the Revolution other shops were established, and at the beginning of the century hatting was the chief occupation of the inhabitants of the town.

Danbury has chiefly been devoted to the manufacture of the stiff or derby hat. From 1840 to 1850 the making of silk hats was undertaken, but this branch of the trade was finally given up. Of late years the manufacture of soft hats has come to be a part of Danbury's hatting industry, and several factories now are devoted entirely to making this style of hat although the stiff hat trade still predominates to a large degree. Ladies' hats are also made to some extent.

During the last ten years the annual shipment of hats from Danbury has averaged over 127,000 cases, there being about three dozen hats to a case. So this city sends out from its factories each year more hats to cover the heads of American citizens than any other one city in the country. Today there are over thirty firms engaged in the business of hat manufacturing in Danbury. These do not include industries auxiliary to the hat trade which have grown up with it and include two hat-case factories, three hat-sweat tories, two silk mills, three hat-sweat

manufactories, twelve machine shops and foundries, and four fur factories.

The hat shipments have shown a marked and steady increase each year, and it looks as if Danbury, with the help of Bethel, formerly a part of the town, can make secure its position as the center of the hatting industry in this country.

The Danbury Board of Trade is an important factor in the industrial development of the city and the object of this association is to unite the energies of the citizens in a common effort to promote the material interests of the town by fostering and encouraging all those industrial enterprises which shall tend to develop the sources of wealth and advance public and private prosperity.

Its officers are: Charles Kerr, President; Arnold Turner, First Vice-President; I. W. Stillman, Second Vice-President; Geo. D. Northrop, Supt. Public Schools, Secretary; John McCarthy, Treasurer.

The Danbury News, at the head of its editorial column, gives this valuable resume of the resources of Danbury:

A county seat.

Sixty-five miles from New York. Population approximately 20,000.

Danbury, Berkshire and Highland divisions, New York, New Haven and Hartford railroad.

Unexcelled hotel facilities.

One of the hatting centers of the country with twenty-five hat factories.

A city offering unsurpassed advantages to industries wishing to locate here.

Two national and two savings banks. Twelve miles of electric railway. Ten handsome churches.

One of the finest public libraries in the state.

Graded and High schools.

A theater.

Owns its own water system, valued at \$1,000,000.

Moderate taxes.

Available water privileges. Sixty manufacturing establishments. Finely equipped public hospital. County jail and court house. Paid police and fire departments. Beautiful lake with summer resorts.

In Rev. Mr. Robbin's century sermon, is the following: "In the manufacture of hats this town much exceeds any other in the United States. More than twenty thousand hats, mostly of fur, are made an-

nually for exportation."

Manufacturing was very different then from what is is now. The manufacturer bought the skins in a bundle and fur had to be taken from them by hand and assorted. Now there are separate industries for cutting, most of the work being

done by machinery. In 1810 there were fifty-six hat shops in operation in the township of Danbury, but each shop did not employ over five hands. At this time the hats were not finished in the shops but sent to New York in the rough where they were made ready for sale. The shop consisted of a small plank-room where the men gathered about a kettle heated by a wood fire and pulled and hauled the bodies of coarse fur, which had been formed by their own hands at the rate of one an hour.

Gradually the shops increased their capacity, employing more men from year to year - the shops becoming fewer in number, but many more hands being employed - large factories finally taking the place of the little shops. Soon machinery came in by slow degrees to work a radical change not only in the method of manufacture, but in the cost of the product. A machine was invented for forming wool hat bodies about 1820, and soon after the invention was perfected many of the Danbury shops put in machines. Then a machine was invented for coloring hats, the former process being very slow and tedious. In 1849 fur-hat forming-machines were first used which worked quite a revolution in the trade. The introduction of machinery has, of course, decreased the number of employees heretofore required for the manufacture of the same number of hats, but the output of the factories has increased correspondingly. It has also resulted in offering cheaper hats to the consumer.

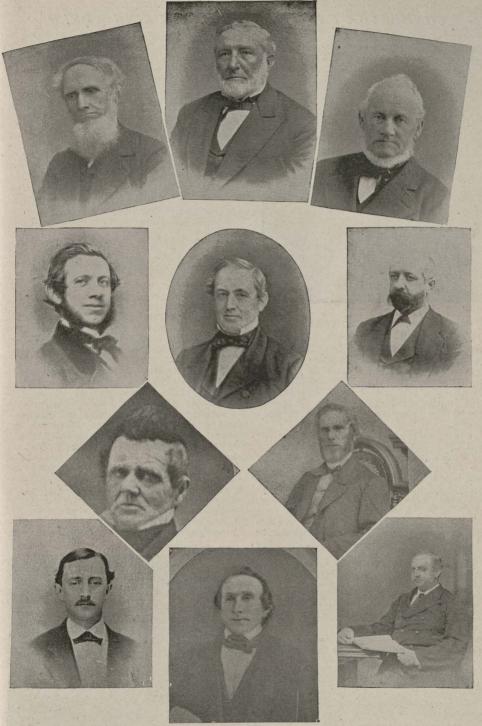
Nearly all the materials of hat manufacture are imported, although there is an increasing use of American silks in trimming. The fur is taken from the pelts of a variety of animals, the most important in the order of their value being beaver, otter, nutria, muskrat, mink, Russian hare, Saxony hare, Scotch hare, Scotch coney, and French coney. Australia, New Zealand, Russia, Siberia, and Scotland, principally, and almost every other part of the world, to some extent, contribute to the supply.

The most scrupulous attention and delicate manipulation must be given to every process of manufacture or the result of negligence will show in the finished hat, either when it is new or after it has been worn a short time. The preparation of the fur for felting begins while it is yet upon the skin of the animal from which

it is taken.

When first received at the factory, the skins are sorted into some eight or ten grades, which are determined either by the kind of skin, or its color, or both, or by some subtle quality in the fur itself inappreciable to the novice.

After sorting, the skins are brushed to



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PIONEERS IN THE UPBUILDING OF DANBURY'S INDUSTRIAL"INTERESTS



"BLOWING" OR SEPARATING THE FUR FROM THE COARSE HAIR

straighten out the fur and cleanse it. They are then plucked, a process in which a heavy bed knife over which a roller runs, removes the hair without disturbing the fur, which lies thick and matted next to the skin. The hair is waste, so far as the manufacture of hats is concerned.

It is upon the serrated edges of the fur that the process of felting depends. They are developed to the utmost by treating the fur upon the skin from which the hair has been removed with a solution of nitric acid and quicksilver, an operation which is called carroting. The skins, carefully dried, are then fed into a machine in which a revolving knife cuts the skin into shreds and rolls back the fur in an unbroken fleece upon an apron arranged to receive it.

This fleece is divided, or sorted, by girls into various grades according to the portion of the skin from which it has been cut. In the case of land animals, the center of the fleece, as coming from the back, is the finest grade, gradually deteriorating in quality towards the edges. In the fur of water animals, these conditions are reversed, the finest fur coming from the bellies.

Thus sorted, the fur is put up in strong paper bags containing five or ten pounds of fur each. This is the condition in which it is usually purchased by the manufacturer.

In the fur stock room of the hat factory the various grades and sizes are carefully weighed into the proper mixtures to make any desired quality of hat, a carefully determined proportion of short fur being mixed with the longer fur to serve as filler.

Thus proportioned, it goes to the blowing room, where it is passed three times through a mixing machine called a devil, which separates the fur on revolving teeth and carries it on an endless band into another machine where the various kinds of fur are thoroughly mixed.

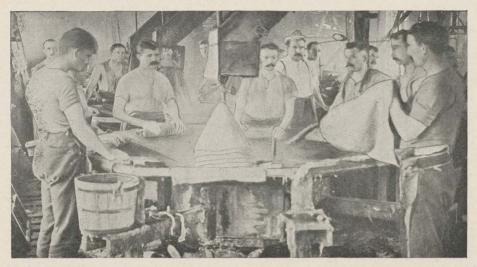
The next process is blowing. Here a cylindrical apparatus revolving with great rapidity, retains only the finest fibres, rejecting the coarsest and all impurities, such as pieces of pelt, dirt, hair, or other foreign substances.

The fur is then carefully parcelled out to the fraction of an ounce of the desired weight of each hat and placed in little boxes, each box containing just enough fur for a single hat, a dozen of these boxes to a case; and by dozens the hats continue to be grouped until they reach the heads of the public. From two and one-quarter to two and three-quarter ounces of fur are allowed for a stiff hat, and from three and one-quarter to five or six ounces for a soft hat, according to the depth of crown and width of brim.

Then, in another department, comes the forming of the hat body. Here a cone of thin plate copper, perforated until it resembles gauze, turns around slowly in a structure like a huge barrel set upon end and attended by two men. Beneath the cone, a fan revolving with great rapidity exhausts the air drawn through the perforations. The fur from one of the little boxes is fed by a girl operator over an apron leading to a series of swiftly revolving pickers and brushes within the machine and passes through a slit the same height as the revolving cone, but much wider at the bottom than at the top in order that the base of the cone may



WHERE THE HAT FIRST TAKES ITS FORM



"SIZING" OR SHRINKING THE HATS

receive the due proportion of material for the formation of the brim of the hat. The flying particles of fur, drawn by the suction of the fan, are deposited evenly upon the revolving cone closely matted and held in place until the entire hat is formed. The material for a hat having been fed into the machine, one of the two men quickly opens the doors, the cone is deftly wrapped in cloths which have been dipped in hot water, is removed from the machine, and another put in its place to receive the next hat. Over the first cone, protected by the wet cloths, a perforated metal cover is slipped and the whole, with the aid of a small hand crane, immersed in a tub of hot water. This operation starts the process of felting sufficiently to enable the operator to slip the hat body from the cone, when the cone is ready to be returned to the machine and receive another hat.

The hat body is now a thin cone shaped bag of fur which may be as much as thirty-two inches deep by thirty-six inches in diameter, or a few inches smaller, according to the size and kind of hat desired. A dozen to sixteen of these bodies, according to their weight, are wrapped in a woolen cloth and by means of hot water and a process of careful manipulation and rolling by hand, hardened sufficiently to prevent the breaking of the delicate fabric in handling.

Next comes the sizing. Six to eight men stand around a large tub of water kept at the boiling point by live steam passing down into it, and work with bare hands. Three or four of the cone-shaped bodies are laid one upon another, dipped into the boiling water, quickly withdrawn upon an inclined apron leading into the

tub, wrapped in a piece of burlap, quickly and lightly rolled beneath the hands for a moment, unwrapped, dipped again into boiling water and the process repeated, the fabric growing constantly thicker and the cone smaller. This is the process of felting, preparation for which was made in carrotting the fur upon the skin, and without which the fur would have proved very refractory. As the tiny barbs upon the fur fibres knit and cling together, the longer fibres are drawn up into little loops while the shorter fibres interlace the interstices,



"STIFFENING"—APPLYING THE SHELLAC



"STRETCHING" THE TIP AND BRIMS
OF THE HATS

themselves becoming looped and knit together as the process continues.

Until recent years, sizing was done entirely by hand. Now, in the finer grades of hats, it is started by hand and finished in a machine in which a wooden roller takes the place of hand manipulation, after the bodies have been withdrawn from the hot water and wrapped in the burlap. The cheaper grades of hats are sized entirely by machine; but it is believed that the felting process is started more evenly by hand and that the liability to damaged hats is much less.

The sizing is continued until the bodies have shrunk to about one-third of the original size, the depth and diameter of the cone when completed being determined by the height of crown and width of brim desired in the finished hat. As the



"BLOCKING" THE HATS TO SHAPE AND SIZE

process continues, the bodies are turned about from side to side in order that all parts may be shrunken equally, and are frequently shaken out and turned over to prevent felting together. Occasionally they are held up to the light and examined, and any foreign particles which might result in a damaged hat removed.

After the sizing is completed, the bodies receive a very thorough examination from an inspector, after which the selvedge which has formed upon the edge of the cone is trimmed off in order that it may not interfere with the proper stretching of the brim. The edge is then marked with one or more notches to indicate the size to which the hat is to be finished. The size of a hat, it may be remarked, is not the diameter of the hat either way across it, but the diameter of a circle of the same circumference as the inside of the finished hat.



"PRESSING" OR FINAL SHAPING OF THE CROWNS

The hat bodies, of a uniform grey in color, are placed in the store room, whence they pass to the coloring department, where they are placed in large vats in which the proper mixtures of dye stuffs for the desired colors have been dissolved. The vegetable dyes of the past are being done away with and alazerine dyes are taking their place; but logwood continues the basis of all these dyes.

After several hours of constant boiling and stirring, the desired color is obtained, and the hat bodies are removed to the drying room and thoroughly dried at a high temperature.

The next step, with the hat still in the cone shape, is stiffening, by forcing through the hat body a solution of shellac dissolved in alcohol. This is accomplished



"FINISHING" OR SURFACING THE HATS

with soft hats, altogether by a machine in which the hat is manipulated by rollers until the stiffening solution is thoroughly and evenly worked into the fabric. To stiff hats the stiffening solution is first applied to what afterwards becomes the inside of the finished hat. This is done in order that the outside of the hat may be kept clean and that none of the stiffening solution except such as has been strained and clarified through the entire fabric of the hat may reach the outside. Eighty per cent or more of the alcohol used in the process is afterwards recovered for use again.

The hats are dried at a temperature of 170 degrees, the shellac thoroughly steamed into the body, the turning reversed, and the hats passed to the stretching department.

Here the conical body assumes the first crude semblance of a hat. The work is accomplished in a machine in which the body is drawn upon a rounded, slowly revolving form, roughly resembling the crown of a hat, a "tip" as it is called, and gently forced down upon the form by the action of the machine until the apex of the cone disappears, while the fingers of the operators draw out the edges in the first appearance of the brim. Another machine carries the development of the hat still farther, the process being divided into what is called tip stretching and brim stretching.

Then comes the blocking, in which a powerful press completes the process of stretching and leaves the tip of the proper size and depth, the brim flattened out at right angles and wide enough for proper shaping into the finished hat.

Up to this point, within limits constantly growing more restrictive as the

work progresses, hat bodies may be safely carried in stock; beyond it they begin to assume the ephemeral characteristics of style.

After blocking, the hats are again dried. If intended for derbys, they next appear in the press room. Here the hat is first placed in a heated oven until the stiffening has become properly softened. It is then taken to a hydraulic press, the crown placed in a steel die exactly conforming in size and shape to the finished style desired. A rubber bag through which cold water is constantly pumped at a pressure of from four to six hundred pounds is forced down into the hat. This distends it to the exact shape of the die. and in a short time cools and hardens it into shape. It is here that the first real separation in process of manufacture between soft and stiff hats begins. The soft hats are softened by steam, drawn over a die of the required shape, ironed by hand with a hot iron to conform, and placed in a cold water press to cool.

Next comes shaving and pouncing. Here the stiff hat is placed upon a cylinder which is run against a bed knife in such a way as to shave off the heavy nap which has been left on the hat after sizing. Drawn over a revolving wooden block, the hat is then finished to a smooth exterior by expert hand work with pouncing paper (a kind of sand paper), polished, and the finest effect of the dyes brought out by "leuring." The "leur" is a piece of coarse, strong muslin stuffed out to about the size and shape of a brick for convenience in handling. This is heated and with it grease is applied to the surface of the hat and thoroughly rubbed in. The soft hats, in the finishing department, are



"MATRICING" OR FINAL SHAPING
OF THE BRIMS



TRIMMING AND BINDING THE HATS

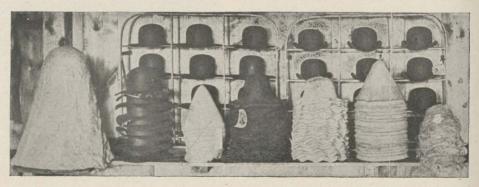
steamed and drawn over wooden blocks and pounced and leured in a manner similar to that used for stiff hats.

Up to this point the brims have remained perfectly flat. The hat is now placed on a machine adjusted to cut off the brim to the exact width desired. From this point the stiff hat passes to the brim shaping and curling department, where the first operation consists in giving the sharp turn to the outer edge of the brim by a machine, the hat having been first softened by heat. It then passes to a matricing machine where, still under the influence of heat, a die made in two parts and together forming the exact shape of brim desired, is placed under the brim, the hat placed brim upward in the machine, and hydraulic pressure of about three hundred pounds applied to force it into exact conformity with the die. Here the hat remains until the brim cools and hardens into shape. In the flanging department, a die in one piece is slipped down over the crown of the soft hat and a cloth tied over the brim as a protection. The brim is pressed into shape over the die with an electrically heated iron and cooled and hardened under the pressure of a heavy sand bag.

The manufacture of the hat itself is now complete, and nothing remains but the trimming. In the trimming-room, nimblefingered women and girls first insert (on stiff hats) the wire around the edge of the brim, next put on the binding, then the band, and last of all the sweat leather. the name of the manufacturer and perhaps that of the dealer for whom it is intended having first been printed upon it and the reed sewed into the edge where it is attached to the hat. In the old days, the employees of the trimming room in some departments made much better wages than at present, and the daughters of many of the best families of the city were engaged in the work. This was especially true when hats were lined with satin, when expert tip makers, as the operators who made these linings were called, frequently made as high as five or six dollars a day. The tip now is only the label which the manufacturer places in the crown of the hat, though the crown, as distinguished from the brim, is called the tip while the hat is going through the factory.

The little ventilating holes in the sides or top of the hat are now punched with a steel die and the hats, after thorough inspection, go to the packing room to be carefully protected by paper and placed in band boxes and the band boxes placed in the cases in which the hats are shipped to the jobber or retailer, to appear next upon his shelves.

Some six millions of men's hats are turned out annually in Danbury alone. They have a long career of usefulness first and last, from the time they leave the factory until, broken, and worn, and faded, they leave the world of hats. Reincarnated, they doubtless have an interesting history as shoddy. But that is another story.



HATS IN THE VARIOUS STAGES OF MANUFACTURE FROM THE "RAW MATERIAL"

TO THE FINISHED PRODUCT



PLANT OF THE HAWES, VON GAL COMPANY

DEVELOPMENT OF THE GREAT HAT FACTORY OF THE HAWES, VON GAL COMPANY

NGENUITY has been one of the great factors in the industrial successes in Connecticut, and the ability to market goods is one of the most important requirements in the building of extensive manufacturing interests. The evolution of industry is a study for the scientists, and but few are skilled in its intricacies. Concentration of energy, systematization in production, and facilitation in mechanical construction are among the factors which give impetus to industrial progression. A remarkable example of ability in this line of the world's work is the Hawesvon-Gal Company, which was incorporated under the laws of the State

of Connecticut in November, 1902, with a capital of \$530,000. Edward J. Von Gal is president and general manager of the Company and holds a controlling interest in the Company's stock.

The plant of the Hawes-von-Gal Company, an illustration of which is here produced, is a model of its kind in equipment, system and fire protection. Situated on the Highland Division line of the New York, New Haven and Hartford railroad, and covering a large area with over 25,000 square feet of floor space, the immense structure commands the attention of travelers as they approach Danbury. Much study has been given to the ar-



SECTION OF MAIN OFFICE AT THE DANBURY FACTORY

rangement of the various departments of the factory by which the hats in their various stages of manufacture pass from one department to another with a surprising routine and regularity. The system is so well planned that a back transportation is never necessary. This is an important factor in the economy of the enterprise as well as the fact that the Company possesses its own lighting and heating plant. Its complete equipment of automatic sprinklers, affords the best factory protection known and required by fire insurance underwriters to-day. In fact, the fire rates on this factory are lower than on any other hat factory of its kind in this country.

The detail of the business is conducted in a handsome and well lighted office on the ground floor, an illustration of which is here produced. Adjoining the main office is a well furnished private office. The Hawes-von-Gal Company employs the highest paid operatives in the hat industry, which together with an equipment of the most modern machinery known to hatting to-day, and with the excellent system and the methods employed, enables the Company to produce hats of a high standard of quality and perfection. This Company has established a precedent and innovation in marketing their hats by becoming one of the first concerns in the country to adopt the

method of selling their product direct to agents only, and never to jobbers.

The agents are selected with great care and represent invariably the best retailing element, with never more than one dealer to each city, each dealer having the exclusive handling of the Hawes hat.

Traveling representatives cover the United States, Canada, Mexico, Germany, Holland, South America and France, appointing new agents continually, and introducing the Hawes hat into all parts of the civilized world.

Five years ago the Company had established 200 agencies; to-day more than 1,000 reliable hat dealers are handling the Hawes hat, as agents for this prosperous and growing Company. It may afford some idea of the

extent and facilities of the Hawes-von-Gal Company to know that its plant is capable of producing about 50,000 dozen hats annually, representing a total of 600,000 hats, permitting an annual volume of business for the Company of nearly \$1,000,000. The New York and Boston salesrooms, located at 1178 Broadway, New York, and 75 Summer Street, Boston, are spacious and attractive, and afford excellent central points for the transaction of the firm's business in these great cities. They are represented in the accompanying illustrations.

The experience of Mr. Von Gal, the active head of this great enterprise is a remarkable demonstration of untiring energy, quick and keen perception, and sound business judgment. Born in Danbury in 1862 he soon became



SECTION OF ONE OF THE FACTORY WORKROOMS



EXTERIOR OF THE COMPANY'S OFFICE AT 1178 BROADWAY, NEW YORK CITY

imbued with the hatting spirit of the town, and at the age of eighteen entered the employ of Crofut & White, at that time the leading hat factory in this country. As an apprentice he was studious and devoted, and during the eight years of his association with this firm he mastered the various branches of the business so well that at the time of severing his connection, he held the position of superintendent of the "finishing department." His spirit of ambition and business energy then asserted itself for he immediately established a business of his own to supply the jobbing trade, which he carried on successfully for eleven years. parting from the custom so generally

in use among the hat manufacturers, of furnishing hats in large quantities to a few of the great distributing houses throughout the country in 1898, he inaugurated the system of selling exclusively to the retail trade with the result that the Hawes-von-Gal Company stands to-day as one of the leaders among the great retail factories in this country. Shortly after the adoption of the retail system in 1808, a combination of interests was effected with Mr. B. F. Hawes of the Hawes Hat Company of New York. The partnership between Mr. Von Gal and Mr. Hawes continuing until the death of the latter member of the firm in 1902.



THE HANDSOME AND SPACIOUS NEW YORK SALESROOM

An incident in Mr. Von Gal's career is well worth relating. At four o'clock on an afternoon in April, 1897 a fire in a neighboring plant communicated with Edward von Gal's factory and caused its total destruction. Without an evidence of discouragement, Mr. Von Gal acted promptly, and at nine o'clock the next morning had the majority of his employees at benches and machines in another factory turning out hats as usual. Undaunted, Mr. Von Gal's ability to act in an emergency enabled him to fill all orders within a week from the time of the fire, operating the factory to its full capacity in the short time.

In the many years that Mr. Von Gal

has been engaged in hat manufacturing his factory has never suffered from strike agitations, although Danbury is known as a stronghold of Unionism This fact may be attributed largely to his practical experience for many years as a jouneyman which has given him an insight into the desires and needs of wage earners and has brought him into close touch with operatives generally as well as with his own employees.

Mr. Von Gal is one of the progressive business men of Danbury being a factor in all that concerns the prosperity of that city. While his many business connections do not permit him much time for social duties, he is a

640 CONNECTICUT IN THE MANUFACTURING WORLD



EDWARD J. VON GAL

President and General Manager of the Hawes,

Von Gal Company

prominent Elk being widely known throughout the country in that fraternity.

The chief product of the Hawesvon-Gal factory is stiff and soft hats and the aim of the Company has been to afford the public a medium priced \$3.00 hat of high quality. Modern methods and excellent factory equipment, and marketing direct enables the Company to place a hat of superior workmanship and quality on the market at this very moderate cost. The Company orders immense quantities of raw material, reducing its cost by these large purchases. The Hawes' styles are awaited with interest by dealers and wearers, and the name has become a household word.



THE COMPANY'S BOSTON SALESROOMS AT 75 SUMMER STREET

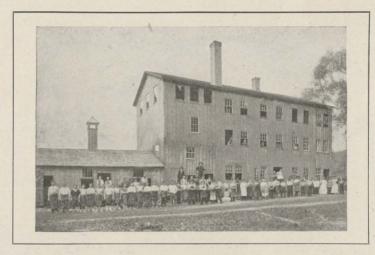
HISTORICAL SKETCH OF D. E. LOEWE & COMPANY AND THE ADVENT OF SOFT HATTING IN DANBURY

The history of Soft Hatting in Danbury for the past twenty years is largely told by the record of the firm of D. E. Loewe & Co.

For many years the Soft Hat reigned supreme in this as well as in other hatting centers, but with the advent of the stiff "Derby," the manufacture of soft hats gradually drifted away to what have since become known as the soft hat centres, and Danbury manufacturers devoted their best endeavors to producing stiff hats. Two or three firms, however,

So much was this the case with D. E. Loewe & Co., that the stiff hat department was abandoned entirely in 1896, and since that time none have been made by them.

D. E. Loewe, the senior member of the firm, is a German by birth and came to this country in 1870. After working at several trades he came to Danbury and learned hatting. He soon reached a managing position, and after serving as foreman in several shops, in 1879 he es-



THE OLD FACTORY OF D. E. LOEWE & COMPANY

of which this concern was one, continued making soft hats, and though the business languished to such an extent as to be hardly profitable for a while, their grip on the trade was never quite relinquished.

In 1893 came a great demand for the Soft Tourist or Fedora Hat. Danbury makers were quick to take advantage of it and though at first the business received was but the overflow from other places, they soon won a name for themselves, and when the craze subsided a season or two after, they had obtained a much increased foothold.

tablished the business he now controls, in company with Messrs. Targett and Beardsley. This partnership lasted one year, when both of the latter gentlemen withdrew. Mr. Loewe then admitted Messrs. Mathias Heinzelman and Charles Mutschele into the concern, which continued under this management until 1885 when Mr. Martin Fuchs became a partner. In 1894 a dissolution of partnership was occasioned by the death of Mr. Heinzelman, and in 1901 Mr. Mutschele retired from the firm, since when Mr. Loewe and Mr. Fuchs have continued the business.

642 CONNECTICUT IN THE MANUFACTURING WORLD

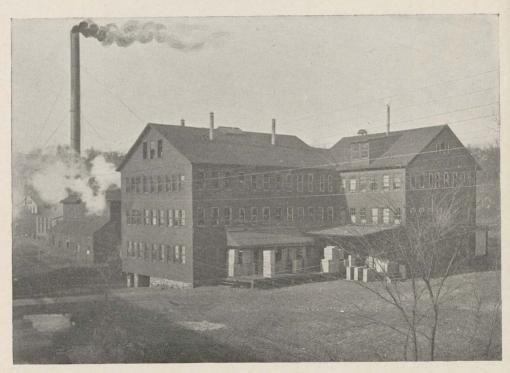
The first home of the concern was a small, though historic, shop, known as the Sturtevant factory, situated near Beaver Brook. This has since burned down. In 1880 these quarters proved too cramped and the present location was taken. That changes have been made in the appearance of the plant since then may be seen by comparing the illustrations.

The early history of the main building, is not definitely known, but that it has one of interest may well be believed. Years ago Danbury had another industry, comb-making, and at least one concern in that line made its home in this building. An old shed, recently torn down, formed part of their plant, and was an old resident at the time of the Civil War. Power was furnished by a mill-pond, since drawn off, and the remains of the old race-way and wheel pit give a touch of antiquity to an otherwise modern plant.

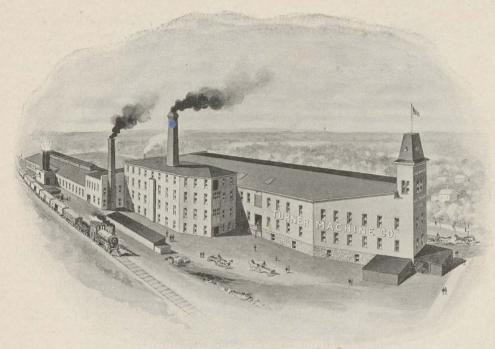
After combs, naturally, came hats, and the buildings were remodelled to fit the new conditions. Various wings and additions have been erected by the present owners, notably a plank shop, or sizing room, which is probably as nearly model in its appointments as any in the district, and new office quarters.

The product of the plant is sold to the wholesale trade only, and through them reaches many remote quarters of the world. Mexico and Japan, South Africa and Australia, the Philippines, and the British East Indies all have contributed to turning the wheels of the shop that has the name of being "always busy."

But in this, as in most lines in America, the great bulk of the business is home trade; and the careful study of the needs of the different sections of the country for years has resulted in a firm hold on trade in every part of the United States and Canada.



THE PRESENT EXTENSIVE PLANT OF D. E. LOEWE & COMPANY



THE PLANT OF THE TURNER MACHINE COMPANY AT DANBURY Operating factories also at Newark, New Jersey, Denton and Stockport, England.

DANBURY SENDS SPECIAL AND HATTER'S MACHIN-ERY INTO ALL PARTS OF THE WORLD—THE PRODUCT ON THE TURNER MACHINE COMPANY

Inventive skill has given Connecticut an enviable reputation in the world of manufactures. The patent records show that the Connecticut mechanic is a most extensive producer. Through his originality and untiring energy, industrial progress has secured a wonderful impetus.

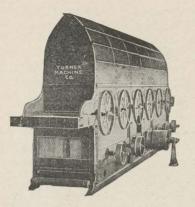
Thus it may be of historical significance that John Turner, an English inventor, and a pioneer in the hatting industry, was among the first to recognize the need of improved mechanical facilities, and his genius played an important part during the last forty years in accomplishing the almost complete revolution of this huge industry.

The name of John Turner is signifi-

cant of the machinist's art the world over, as a firm of this name was established as far back as 1859 at Denton, England, with John Turner as its head, and since that year has extended its influence throughout the civilized globe.

In 1900 an amalgamation of the interests of John Turner and Giles Atherton, another large English manufacturer and inventor was effected, the combination controlling many valuable patents and almost the entire output of hatters' machinery, being known as Turner, Atherton & Co., Limited, with capital stock fully paid of \$875,000.

The first McKinley tariff was the influence that led to the establishing



THE BLOWING MACHINE USED IN HATTING

One of the many kinds of hatters' machinery built
by the Turner Machine Company.

of a branch of the English industry in this country, and Danbury was selected as a site for a plant because of the constant requirements of the many large hat factories in that section, as well as for the exceptional advantages in perfecting mechanical improvements.

The Danbury plant, an illustration of which is here produced, is known as the Turner Machine Company, and its managing director is Arnold Turner. Another plant was soon established at Newark, N. J., under the management of Henry H. Turner The heads of both of these factories are sons of the late John Turner, the founder of the business.

The allied companies, American and English are closely identified, and together supply fully seventy-five per cent. of the hatting machinery used in the world, employing hundreds of skilled machinists and other artisans.

The Turner Machine Company is an extensive plant located on Maple avenue, Danbury, adjacent to the Highland Division of the New York New Haven and Hartford railroad, having excellent shipping facilities.

The factory is a substantially built structure covering a large area, and

is equipped throughout with the most modern labor-saving devices. It contains in addition to the machine shop, a brass and iron foundry which the company owns and operates.

The Danbury factory not only builds hatters' machinery, but is constantly engaged on large contracts for special machinery, of all kinds, for many of the large New England manufacturers, its facilities affording the greatest expediency in filling contract orders of this nature.

In addition to orders, single machines or their parts, the Company is often called upon to build and install complete equipments for hat factories and frequently as well to draft plans for the factory buildings of an entire plant, the specifications and installment depending on the producing capacity required.

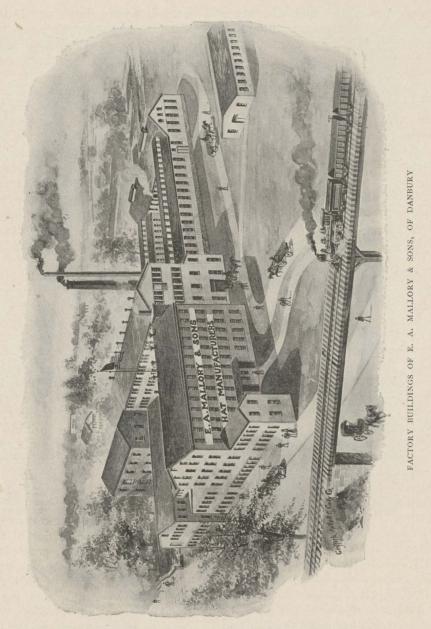
Thus the Turner Machine Company of Danbury can build and equip a plant completely and turn it over ready for making hats.

From their extensive connections with all the important hat manufacturers in the world, and their years of service in this business, the product of the Turner Machine Company has long been recognized as the standard.

Their export business is large and some idea of the growing importance of the felt hat industry may be gained from contracts for machinery now in the works for erection in Japan, Russia, Spain, Australia, and South America.

The Company has offices in New York, London, Paris, Berlin, Milan, Rio de Janeiro, and Calcutta.

Mr. Arnold Turner, the head of The Turner Machine Company, is vice-president of the Danbury Board of Trade and has interests in a number of the large hat factories of Danbury and other enterprises.



ONE OF DANBURY'S HATTING INDUSTRIES NEARLY A CENTURY OLD—THE FIRM OF E. A. MALLORY & SONS

The inception and development of Danbury's hatting interests affords a fascinating and instructive story of industrial progress. Since the middle of the eighteenth century this enterprise has been fostered in Danbury. Gen-

erations of hatters have come and gone There are hatting concerns in Danbury to-day occupying factories, the founders of which have long since been removed by death or retirement,— and others whose experience covers a long number of years, and who are still engaged in the manufacture of hats under the original firm name, and in the original location.

The name Mallory has been identified with hatting in Danbury since the early part of the nineteenth century, the manufacturing record of this well-known family antedating by many years that of any other present day Danbury hatter. The original business has been handed down by its founder and his successors, until to-day the management of this old established business represents the third generation of the Mallory family.

The founder of the enterprise, Ezra Mallory, was born in Redding, Connecticut in 1785, and later settled at Great Plain near Danbury, establishing in 1813 a hat shop on a small scale in that location, employing from six to twelve hands, and turning out from three to six dozen hats per week.

At sixteen years of age, his son Ezra A. Mallory began work in his father's hat shop, and was engaged in this occupation until the death of his father in 1845, continuing the business in his own name in Great Plain and later in Danbury until 1862, when he formed a partnership with P. A. Sutton, under the firm name of P. A. Sutton & Company. Mr. Mallory remaining at the head of the firm. Upon the withdrawal of Mr. Sutton in 1863, Mr. Mallory conducted the business in his own name without partners until 1878, in that year taking his son, Charles A. Mallory into partnership, and continuing under the name of E. A. Mallory & Son until 1883. Another son William E. Mallory was admitted to the firm in that year, the partnership becoming E. A. Mallory & Sons. The year 1897 marked the retirement of Ezra A. Mallory the head of the firm, after a continuous and successful record of over sixty years in this, his life time business. H. B. Mallory the son of Charles A. Mallory was taken into the partnership in 1900 without changing the firm name.

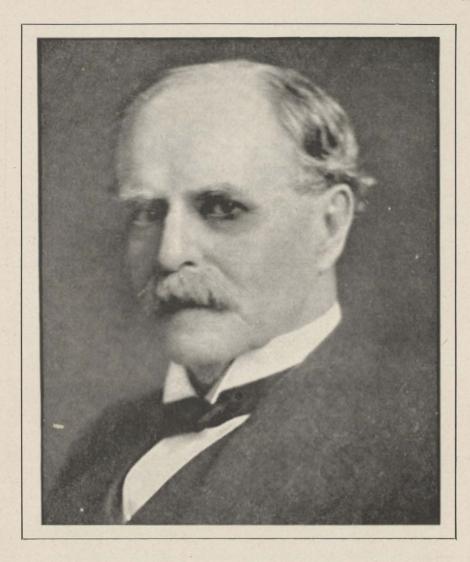
The magnitude of the Mallory business to-day presents a wonderful contrast to that of nearly a century ago. The immense plant, with main buildings four stories in height, an illustration of which is here produced, is known as one of the largest and best equipped hat factories in the country; employs from 350 to 450 hands, and turns out annually 48,000 dozen hats of all kinds, the annual output being valued at \$530,000.00

The Company generates its own electricity for lighting the plant, and furnishing power and heat. The New York office is at 13 Astor Place, and the Boston office at 44 Bedford street.

In the hat industry, quality of the raw material used and high standard of workmanship give hats only their intrinsic value. In addition hats must be fashioned in the most approved style, which is an art in itself.

This Company's corps of expert designers have placed the products of E. A. Mallory & Sons' factory in a class distinctively its own. The products of this factory "Mallory's Make Men's Hats" are not confined to the most recent eccentricities of fashion. Their wearers include people in many parts of the world with varying occupations. The clubman of Fifth Avenue, the cowboy on the plains, the Maine lumberman, the Southern worker, the humble miner, the California fruit grower are all provided for at this large factory with various styles to suit their needs and fancies. In the past ten years "Mallory's Make Men's Hats," have become popular in every part of the Western Hemisphere.

[To be continued]



I have read with interest the last number of The Connecticut Magazine, and am much pleased with its able articles and fine illustrations, and I wish it the success it deserves. With best wishes, I am Sincerely yours,

Governor of Connecticut.