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Lard Cheese.

The following statements with regard to the use of lard in cheese making were made recently at Albany by Assemblyman Crapsier, of St. Lawrence county, before the Assembly Committee on Public Health:

The main elements in cheese manufactured from milk are caseine and fat. Rennet is used to coagulate. It is necessary to add oil if a richer cheese is wanted. We have never been able to do it in this country until recently. Lard is now substituted in place of cream or butter oil. To 100 pounds of milk we add 1½ pounds of lard, and have to buy the best lard we can. We get it at Chicago or elsewhere, and it has to be deodorized by heat in the usual way. Steam-rendered lard is better than kettle-rendered. By the new process it requires six to eight hours to render it. One would get 4 pounds of cream from 100 pounds of milk, and this 4 pounds is one-third caseine, so that about 2 pounds out of 100 is real oil. Therefore, 100 pounds of skim milk and 1½ pounds of lard will make 10 pounds of cheese. It makes a good quality of cheese. We have been able to sell all we could make. We make salable cheese out of skim milk, and so benefit farmers.

This new cheese is made from sweet milk, from which cream has been removed at 40° F., after standing twelve hours. No chemicals are used in this process, except some coloring matter, which we make. I have twenty-one factories, and have put them to making lard cheese as fast as possible. We have to work on the sly, but the honest farmer would not take any advantage. We got along with them by paying more for their milk than it is worth. Seven of my factories are now making the lard cheese, which goes to Chicago, Boston, New

York, and Baltimore. The fact that it was made of lard sold the goods. The skim cheese factories in St. Lawrence use chemicals. I skimmed mine so close for butter that it could not make salable cheese. This kind of cheese we can sell to the middle classes, but not to the millionaires. Lard can be treated by difference of temperature and not be

BARREL MACHINERY.

In our issue of Feb. 19 we described several improved machines made by Messrs. E. & B. Holmes, of Buffalo, N. Y., to be used in the manufacture of barrels. We are now able to present our readers with engravings of other machinery made by this firm and applied to the same manufacture.

This firm make a machine for dressing rived heading of all sizes for beer, oil, sirup, spirit, and other casks in which rived heading is used. The machine receives the heading in its roughest condition, takes out all of the winds and crooks, and prepares it at the rate of three thousand pieces per day for jointing and dowel boring. This is done on the combined heading jointer and fan, which delivers its shavings at any desired point. Fig. 2 shows a plain heading jointer.

The heads after being dressed, jointed, bored, and put together are made either truly circular or elliptical by the head rounding machine, shown in Fig. 1. This machine is fed by an attendant, but it turns and discharges the head automatically, while another head is being taken up to place in the machine. An important feature of this machine is an attachment for giving to the head a slightly oval form to compensate for the shrinkage and compression of the material.

The operation of this attachment is entirely automatic. This machine forms the heads rapidly, and is adapted to heads of different sizes and thicknesses. It completes the machine work on parts of the cask, but machines are provided by Messrs. E. & B. Holmes for doing much of the subsequent work of putting together and finishing.

Fig. 4 shows a machine for leveling kegs and small casks. This machine drives all of the truss hoops at once on kegs

[Continued on page 178.]

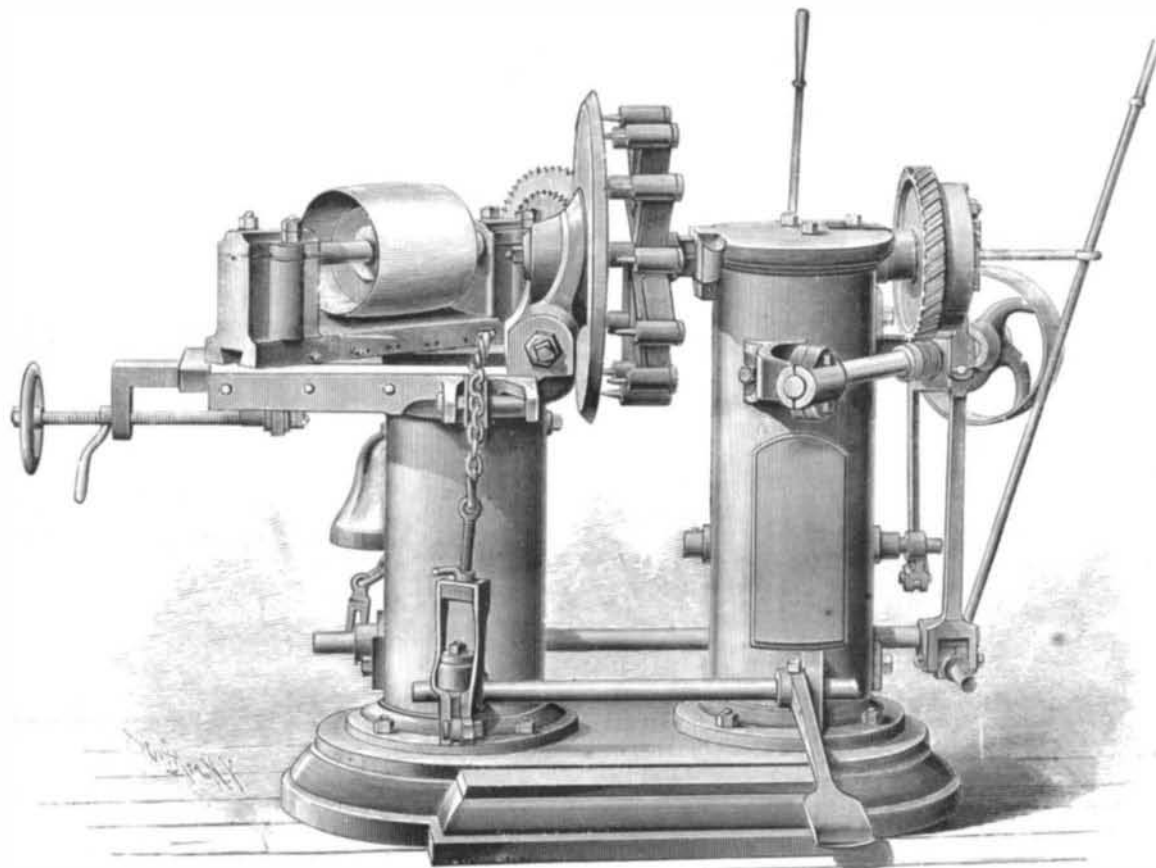


Fig. 1.—MACHINE FOR ROUNDING HEADS.

injured like butter. To deodorize the lard we blow hot steam through it. We manufactured 2,500 boxes of 60 lb each last year.

THE artesian well in Providence street, Boston, has been sunk about 1850 feet. It is believed that the well can now easily deliver from 300,000 to 400,000 gallons of water a day

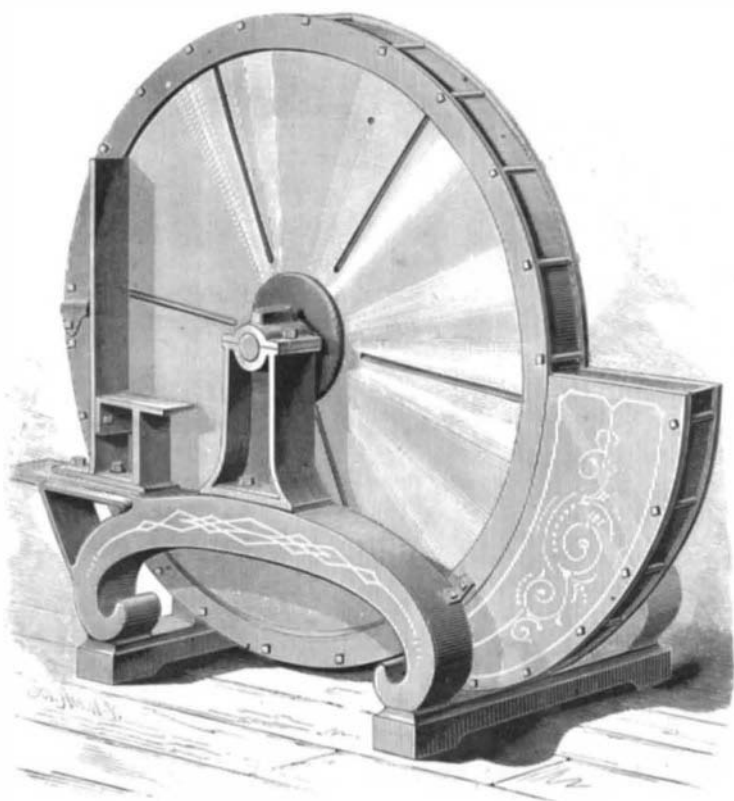


Fig. 2.—MACHINE FOR JOINTING HEADING.

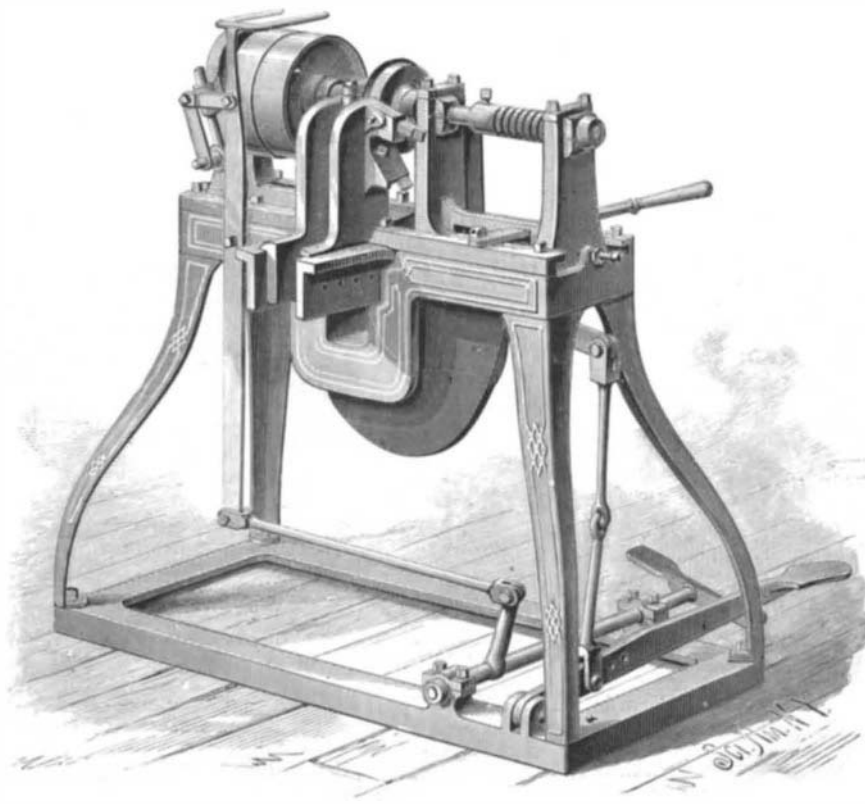


Fig. 3.—MACHINE FOR TURNING THE HEADS OF KEGS.

BARREL MACHINERY MADE BY E. & B. HOLMES, BUFFALO, N. Y.