

FLAX MANUFACTURING IN 1718.*

On August 4th, 1718, an advance party of Scotch-Irish emigrants arrived in five ships at Boston. They selected for their permanent abode a tract twelve miles square, called Nutfield, which now embraces the townships of Londonderry, Derry and Windham, N.H. It was there that linen, as a matter of commerce, was first made in New England. The hum of the spinning wheel was heard in every house. As early as the year 1748, the linens of Londonderry had so high a reputation in the colonies that it was found necessary to take measures to prevent the linens made in other towns from being fraudulently sold for those of Londonderry manufacture. A town meeting was held for the purpose of appointing "fit and proper persons to survey and inspect linens and hollands made in the town for sale, so that the credit of our manufactory be kept up, and the purchaser of our linens may not be imposed upon with foreign and outlandish linens in the name of ours." The people brought their spinning and weaving implements with them from Ireland, and their industry was not once interrupted by an attack of Indians. The improvements in the cultivation and manufacture of flax, which the Scotch-Irish brought to Londonderry, were soon adopted by many other settlers in New England. Many families made it their principal product, although the seed at that time was not as valuable as now. In Fryeburg, Conway and Albany, settlers from the banks of the Merrimac cultivated flax, having carried on its manufacture for many years before removal. Hundreds of persons, if their history were known, would reveal to the world full accounts of a long and detailed experience, for many years, throughout New England, in the culture and manufacture of flax. In 1770 there lived on the banks of the Merrimac a young farmer by the name of Jeremiah Gilman. He was largely engaged in the manufacture of flax by hand power. Tradition says that the success of this farmer, over his immediate neighbors, in the flax business was in consequence of the experience and labors of a manumitted slave in his employ, who was celebrated for working flax. Wishing to secure a larger tract of land upon which to settle his family of twelve children, he went up to the head waters of the Merrimac and afterwards made arrangements for commencing the settlement among the mountains of New Hampshire. A large tract of land was purchased in the township of Burton, now Albany, and he commenced a settlement there, while his brother chose a location farther north. They were followed by other families, all of which went more or less into the manufacture of flax, but none so extensively as Co. Gilman, who, in connection with a grist mill that he had built, arranged to spin flax by machinery and water power, the first which is supposed to have been erected in America. After many years had passed, the eldest son returned to his father's house. He worked upon flax, and introduced the mixture of cotton and flax threads into cloth, and from that period the united efforts of the family were joined with others in the neighborhood to make the most of this article as a means of income.

UNEVEN YARN.

It is usual to blame all uneven yarn making to uneven roving, says a writer in *Fibre and Fabric*, that has been the standard excuse for years. Now, the carder's sins of commission and omission are many, but they have this redeem-

ing feature, they are all easily seen and found before going far or before much damage is done. In reeling yarns on the mule or jack, it is the usual rule to take five bobbins from different spools, a short time after the set of bobbins has started, or at the bottom. This, no doubt, gives a fair average, and perhaps is as reliable as can be got. Reel these same bobbins when the set is full, and you hardly ever find them the same as at the bottom. This is nothing new, you say. Well, why is it? Take five bobbins off of one spool at the end of the mule or jack and reel the same. Now take the same spool and put it in the centre of mule and spin a few draws more. Reel it again and in the same way. They don't agree in weight. Now why is it? Let us think it over. Get a line and run it from one end to the other just above the rolls. Level the line; never put a level on the rolls. After having got your line tight and level look and see where your rolls are. Some places will be about right; other places down an inch or more; the spindle points will be the same or worse on the carriage. This shows that the floor has settled in places; sometimes caused by shafting on the girders or floor-joists in the room below, generally by weight of mule head. The rails under the carriage go with the floor, and that throws the spindles out of true pitch. Say your spindles were set at 78 degrees when first set up, that is three inches forward pitch from bottom of spindle to top of spindle 18 inches long. The lowering of the rail would increase the pitch to say four inches. Now here is something that will give you very uneven yarn. On 4-run work, I have seen yarn at bottom of bobbin 4-run and at the top of bobbin 2½-run, all caused by drawing off the bobbin when the carriage was coming out. This to-day is the cause of coarse threads, for short lengths showing so badly in dress goods, sacking and all light weight goods; besides all the monkey and parrot time in card and spinning rooms. There is only one remedy: Line up; level up and have your carriage go up close, so the spindle points will come up to the rolls to about 2½ inches. Much more might be written on this subject. Now one word to carders. Learn to spin; learn all the points about a mule or jack. Then you can come within a row of apple trees of the size of yarn you want to make and know where the trouble is. No carder will ever be master of his room until he can spin his own roving.

COCKLED GOODS.

There is nothing more serious as an imperfection in the finishing room than cockled goods, and it is doubtful if anything is more likely to cause a controversy as to who should bear the blame. Very naturally the controversy arises because there is hardly a place from the sorting board to the fulling department that may not contribute to the trouble. Because the cockles are developed in the fulling is by no means the proof that the cause is there, or that it can be remedied by the fuller, and yet they may be caused by fulling altogether when the work in other departments is faultless. But there is no need for a controversy to long exist with the fuller, for it may be very easily determined whether the cause is in the fulling or elsewhere, though if elsewhere it is not so easily located. The best way to determine whether cockles are caused in the fulling or elsewhere is to spread out ten or more yards of the cloth upon the floor, so that the cockles can be plainly seen, and by their appearance it can at once be determined whether they originated in the fulling. If they did, they will appear longer in the middle of the cloth and shorter or less marked near the selvages.

* Extract from "Fibrella," a book published in 1861.