a hoary reminiscence of bygone days. The old wheel house still contains the water wheel of thirty-three feet diameter, used for actuating the looms. Two of the old looms had even been preserved, and were to be sent to the London World's Exhibition of 1851. It happened, however, that the warehouse in which they were kept was destroyed by fire, and the looms shared the same fate.

After having been in operation for about twenty years, the mill was finally suspended in 1813, because it was not sufficiently remunerative. The beaming and sizing machine had not yet been invented. A firm at Paisley, Scotland, bought the forty looms, and operated them for a number of years with steam power. A short time after their purchase, however, the beaming and sizing machine was introduced in Glasgow, by which power loom weaving became remunerative, and within a few years after, thousands of such looms were built and operated both in England and Scotland. In 1842, Walter McLutheon was still superintendent of the Wellington Mills, in Glasgow, and also old Mr. Kinloch was still alive. He went once on a visit to Glasgow, and the bosses, fixers, and beamers of the already numerous mills in Glasgow celebrated the occasion by tendering him a sumptuous dinner. At the close a collection was taken up for the old man, which resulted in sixty pounds. He spoke of his early trials and mishaps, and said that, in Scotland, the weavers had offered no opposition to his invention. It had been otherwise in England, however, where the hand loom weavers had been of the opinion that they would be reduced to starvation by the introduction of the power loom. The first mill, at Staleybridge, England, which he had fitted up with one hundred looms, had been destroyed and burned during the night. It had been rebuilt shortly afterward, however, and fitted out on a larger scale than before. His life had been threatened repeatedly, for which reason he had lived for some time in America, where he had on all sides been received with open arms, and every facility had been offered him to introduce his loom in the different parts of the country. A few years afterward his looms had been introduced all over the continent of Europe.—Industrial Record.

FAST BLEACHING ON HOSIERY.

The economical arrangement of a dyehouse depends entirely upon its size, and, like every other enterprise, the larger the dyehouse the better can it be managed, and at the least possible cost. In taking the arrangement of a dyehouse into consideration, it will be discussed entirely from the standpoint of a hosiery manufacturer dyeing aniline oxidized black. In the first place the saturating room, in which the goods are started, should have a concrete or vitrified brick floor, pitched slightly to a gutter or trough with a grating in the centre of the room that will carry away the refuse matter into the sewer. The tomtoms should be placed as close to the extractors as possible, so that in removing goods from the tomtoms there will be a minimum of waste liquor. A separate extractor should by all means be used for saturating and chroming goods. After they have been passed from the oxidizing room, and taken into the ageing room, there are two methods of finishing. One is by allowing them to remain in the oxidizing cages a sufficient length of time to take on a lisle finish. The other is, thoroughly to oxidize them, remove them, and give them sufficient time to age, then pass through the singeing machine. The writer has found that the lisle finish gives a prettier shade and a finer finish, although goods that are singed are probably stronger, The point in oxidized blacks that gives the dyer the most trouble is the question of letting the goods become tender; it is a continual nightmare to every dyer, no matter how careful he may be. There are so many different causes that tend to weaken his goods, that it is only by exceeding caution and care that this can be obviated. But as no other black has yet been discovered that is as fast and as cheap as aniline black, it is still the universal method of dyeing cotton hosiery.

SULPHUR BLACKS.

During the past two years sulphur blacks have claimed the attention of the dyer, and with more or less success, and for those with small plants, who do not care to go to the expense of equipping a dyehouse, they have answered the requirements very fairly. Sulphur black does not dye the fibre black all the way through. The fibre takes the dye only on the outside. Again, sulphur black develops so irregularly that it is almost impossible to get them the same shade twice in succession. In passing from the sulphur black bath into the cold water bath, the coming in contact with the atmosphere has such an effect that it very often ruins the shade of the goods, unless very great care is taken. Some dyers use an open kettle with very good results in dyeing sulphur black, while others use the laundry machine. There are also several special kinds of machines, including Obermaier, Vacuum, and Klauder-Weldon, made expressly for dyeing sulphur blacks. In dyeing sulphur black better results are obtained if the goods are first taken out of the sulphur black bath and put into a cold water bath containing a slight percentage of sulphide of sodium, which will dissolve any of the dyestuff left in a precipitous form on the goods, and afterwards pass through another cold water bath.

There is a fortune awaiting the chemist who will invent a process as cheap as the oxidizing process for fast black, and which will give us as good color, and at the same time remove the great bugbear of tender goods. This drawback to oxidized black is one that must be overcome, and, it is to be hoped, that it will shortly be discovered how this can be removed. There is also the question of cost to be considered, and as soon as a cheaper one is invented the better it will be for all concerned. Mill managers are making experiments with other blacks; one very large manufacturer is using sulphur black with fair success, another both single finish and lisle finish oxidized black, but one and all make the same complaint, and that is that a different process from the ordinary oxidized lisle finish black is required. With so many different manufacturers experimenting, it can only be a question of time before there is some new development, and it is needless to say that the chemist or the dyer who discovers it will be able to make a fortune for himself, as well as place the hosiery trade under everlasting obligations.—Textile Mercury.

SPEED OF SHAFTING IN TEXTILE MILLS.

Textile manufacturers demand high speed in order to get a large production, and as a result the speed of the shafting in textile mills exceeds the speed which generally is found sufficient for all purposes in other manufacturing establishments. Two methods are used in securing the desired speed. The older way is to run the line shaft at a slow speed and use large pulleys on it to transmit a higher speed to the other shafting; the latter method is to run the line shaft at a high speed. It is generally admitted that it is more economical to run the main shaft at a high speed than to in-