

softened extremity and affixed to the periphery of the wheel, which has about 12 inches face. The wheel is simultaneously set in motion, and the glass thread is drawn out from between the burners and reeled upon the wheel at the rate of 7,500 feet per minute. By increasing the speed of the wheel, a finer thread is obtained, and *vice versa*. In passing from the flame to the wheel, a distance of some five or six feet, the glass thread is cooled off, but its elasticity is preserved. When enough of the thread has been reeled upon the wheel, the next operation is to remove the layers, which is accomplished without difficulty; and it is then cut into convenient lengths and woven on a loom similar to that used in weaving silk goods.

In the earlier trials at glass weaving, only the woof of the fabric was of glass, but lately fabrics have been woven of which both woof and warp were of glass. The manufacturers of these novel products have sent samples of their work to New York and Chicago, and it is reported that they claim to be able to duplicate any garment or other woven article sent them, in color, etc.

### Spinning and Weaving Glass.

It is reported as an interesting technical novelty, that a firm of glass manufacturers in Pittsburgh, Pa., have succeeded in producing glass threads of sufficient fineness, elasticity and strength to permit of their being woven into fabrics. Garments woven from glass fiber by this novel process, are said to have been successfully made, and the announcement of the fact has given rise to quite an amount of speculation as to the future utility of the process.

The plan of the manufacturers in question—Messrs. Atterbury & Co.—which is quite interesting to follow, is thus described: The glass employed for the purpose is similar in quality to that used for tableware. From this, rods averaging half an inch in diameter, and of various colors, are drawn out to any desired length. These rods are then so placed that the flame of two gas burners is blown against that end of the rod pointed towards the large "spinning" wheel. This wheel is 8½ feet in diameter, and turns at the rate of 300 revolutions per minute. When the flame of the burners has heated the end of the glass rod almost to the melting point, a thread of glass is drawn from the

Of the articles manufactured in the manner above described, our account speaks of a tablecloth of remarkable beauty, shining with a satiny, opalescent luster by day, and very brilliant under the gaslight. Wonderfully pretty plumes in opal, ruby, pale green, and other hues, are also said to have been made.

From the above, it might be inferred that glass might be successfully employed on a large scale as a substitute for cotton, linen, silk, etc.; but though some excitable scribes have permitted their enthusiasm to get the better of their judgment in predicting a great future for fabrics of glass, we do not expect much from the innovation. There will no doubt be a considerable field of utility open for these novel fabrics when their manufacture has been properly perfected, in the production of colored plumes for hats, and for similar ornamental objects, but the manufacture of glass fabrics for wearing apparel we regard as quite impracticable. The manufacturers may be able to produce a woven fabric which possesses as a whole considerable flexibility and strength, but the individual fibers are still brittle, and the contact with the skin of the fine spicules of the fibers as they wear off or break off, would be simply unendurable. While, therefore, we regard the new process as highly interesting and useful, it will be as well at the outset not to credit such extravagant views of its extended utility as have been given out.