

cal Society, and it was stated that for laboratory work it would prove very useful. Its thickness ranges from three-sixteenths to one-eighth of an inch; it can be readily cut with scissors or borers; after being moistened it can be moulded to any shape; and it answers very well for making crucible supports, sandbaths, muffles, retorts, and such like purposes. It is manufactured at 31 St. Vincent Place, Glasgow, and its cost there is about one dollar a pound.

PREPARATION OF SOLUBLE GUN COTTON.—Mr. G. H. C. Klie, (*Amer. Jour. Pharm.*, June), reviews various processes for making pyroxylin, and also states his own experience on the subject. He prefers the old method with nitrate of potassium, and prolonged immersion of the cotton, as giving the most uniform and satisfactory results. This method may be described for those who are unacquainted with it; but we might mention, incidentally, our own convictions, based on considerable experience, that cotton prepared by long immersion may be very soluble, but collodion made with it yields a film which is not perfectly transparent, but more or less cloudy or dull. This is no detriment if the collodion be for medicinal use, but is an insuperable bar to its employment in photography. The mode of preparation is as follows: Mix, in a mortar of proper size, $7\frac{1}{4}$ ounces of granulated nitrate of potassium and $6\frac{1}{4}$ fluid ounces of sulphuric acid, which may range in specific gravity from 1.833 to 1.900. By the aid of a pestle quickly incorporate 180 grains of cotton freed from impurities, and allow the mixture to stand 12 or 15 hours. Take out the cotton and wash thoroughly in many waters, finally finish with hot water and remove every trace of acid. Dry carefully, or, if the pyroxylin be wanted for immediate use, displace the water by percolation with alcohol. By limiting the immersion to five minutes, or less, soluble cotton may be produced, but if boiling water be used for the first washings, as sometimes recommended, the pyroxylin will lose its solubility, but retain its explosiveness. The yield from 180 grains of cotton is about 290 grains or an increase of 61 per cent.

CELLULOID.—It is stated that in the United States there are now fifteen manufacturing establishments, employing twelve to fifteen hundred hands engaged in the production of articles made of celluloid. This substance was invented some eight years ago, by an American, but it was not until 1874 that celluloid goods were put upon the market. It has however turned out quite a success, and is capable of being applied to innumerable uses. It can be made to imitate ivory, tortoise shell, horn, leather, rubber, jet, amber, lapis