

GILDING STEEL.

Polished steel may be beautifully gilded by means of the ethereal solution of gold. Dissolve pure gold in *aqua regia*, evaporate gently to dryness, so as to drive off the superfluous acid, re-dissolve in water, and add three times its bulk of sulphuric ether. Allow to stand for twenty-four hours in a stopped bottle, and the ethereal solution of gold will float on the top. Polished steel dipped in this is at once beautifully gilded, and by tracing patterns on the surface of the metal with any kind of varnish, beautiful devices in plain metal and gilt will be produced. For other metals the electric process is best.—*Industrial World*.

A "COTTON" LECTURE.—Mr. J. B. King gave a lecture before the Y. M. C. A. of Boston recently, on Cotton it being the first of a series of commercial lectures to be delivered, this season. He said: The history of cotton carries us back to the remotest ages of antiquity, it being mentioned by Herodotus as early as 450 years before the Christian era, while it must have been known and used in India for centuries before. Its original home was upon the banks of the Indus and the Ganges, where, with the rudest distaff and spindle, it has been manu-

factured so delicately as to be almost transparent, and so light as to be called "webs of woven wind." Alexander the Great first introduced it into Europe as an article of commerce. Its progress was then traced through the Middle Ages into its development as the greatest industry of modern times. The cotton plant was then described, with the essential conditions of its successful growth, the methods of planting, picking and preparation for the market. While silk, wool and all other materials for clothing and kindred purposes are limited in the geographical extent of their use, cotton is almost universal in its adaptation, and stands alone at the head of textile industries. The principal cotton-producing countries, in order of production, are the United States, India and Egypt. The story of the cotton interest in this country was graphically told from its first planting in 1621. The great influence of Whitney's invention of the cotton gin was shown as having wonderfully increased its merchantile importance. Most interesting figures were given regarding the magnitude of the crop of 1881, which was valued at \$300,000,000. If it had been made into common calico, twenty-eight inches wide, it would have reached around the world 483 times, or over 12,000,000 miles, and, if spun into thread as fine as has been manufactured, it would have extended further beyond the sun than the sun is from the earth.—*Manufacturers' Gazette*.

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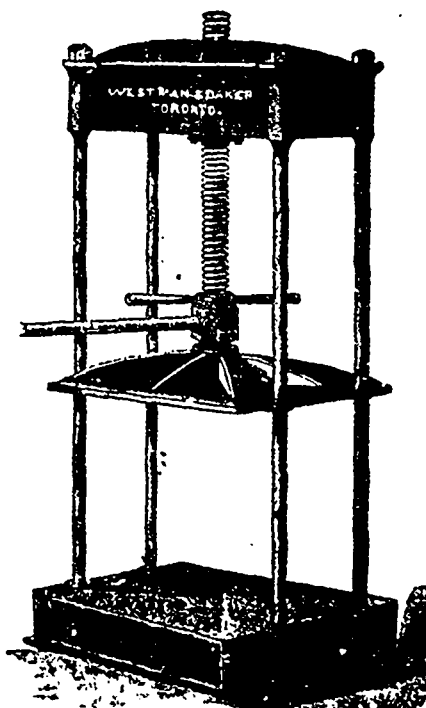
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