Cloth-drying Machine. A machine with heated rollers over which cloth is passed to drive off the moisture acquired in dyeing, washing, etc. In the example, \( M \) is the feed-roll from which the cloth unwinds; it thence passes over the cylinder \( B \), against whose surface it is tightly drawn by

Fig. 1883.

the guide-rollers \( L^1 \), \( L^2 \), \( L^3 \), while the fans \( C \) drive a current of air through the meshes of the wire-gauze cylinders and the cloth. \( N \) is the take-up roller on which the cloth rewinds.

A steam cloth-dryer shown at the Paris Exposition had an annular steam-chamber constructed of two concentric cylinders, which formed a closed cavity, and constituted the circumference of a wheel more than 12 feet in diameter. Around the circumference of this wheel, which turned slowly upon a horizontal axis, the cloth was carried, being kept in position by means of two endless chains having tenter-hooks attached. The cloth passed round nearly the entire circumference, being carried off on the same side at which it was introduced; the velocity of motion at the circumference was about six inches per second.

The construction permits the steam-chamber to be made very secure against accident, and yet to present an exterior of quite thin metal, facilitating greatly the transmission of heat. The necessary strength is obtained by means of numerous interior stays connecting the two cylindrical surfaces. The steam is admitted through the axis.