Cot'ton Spin'ning. The Clement process for spinning cotton direct from the seed cotton is mentioned in many of the journals of the day.

"Engineering and Mining Journal" xxviii. 423.
Louisville "Evening Post and Press" Dec., 1879.

The machine is a combined gin and card, making slivers

The machine is a combined gin and card, making slivers from seed cotton. It consists of a 36" top-flat self-stripping card; the attachment (which is a diminutive gin $18 \times 18 \times 36$ "), is substituted for the licker-in and feed rollers of the card; its saws are 7" in diameter, with fourteen teeth to the inch, and revolve from 100 to 200 times per minute. The brush connected with the saws is a cylinder covered with bristles; its periphery revolves a little faster than the saws, and has also a traverse or horizontal motion. The periphery of the card travels a little faster than the brush; a feed table is placed above the card and connected with the attachment by a chute, and gives a regular supply of seed cotton to the attachment. A stopmotion is used to save waste in case of accident. These, with a small drawing roller between the doffer and calender rollers, to reduce the sliver to the ordinary working size, and a cam motion to receive said sliver, are all the changes and additions made to the card.

tions made to the card.

The seed cotton is spread upon the endless apron of the feed table, and passes thence through the chute into the attachment, where the lint is removed from the seed, and while on the fine saw teeth (after passing the ribs) passes through a set of combing plates, which removes all extraneous matter, and delivers the filaments to the brush, which delivers them to the card, and thence through the doffer, small drawing and calender rollers; being delivered as perfect sliver into a revolving can.