

B. C. CHAMBERS.

PRIMING-ATTACHMENT TO PLANING-MACHINES.

No. 169,520.

Patented Nov. 2, 1875.

Fig. 1.

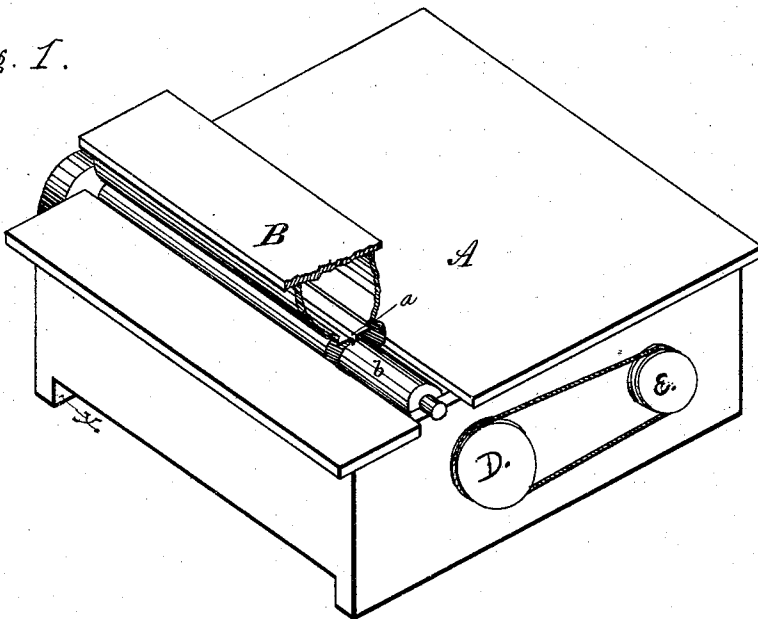


Fig. 2.

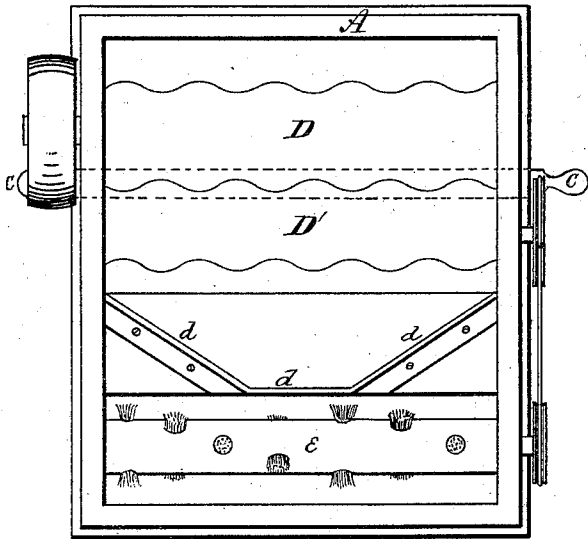
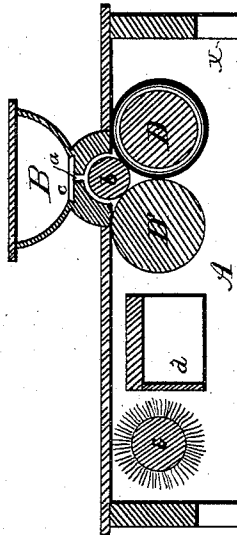


Fig. 3



Witnesses

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IMPROVEMENT IN PRIMING ATTACHMENTS TO PLANING-MACHINES.

Specification forming part of Letters Patent No. 169,520, dated November 2, 1875; application filed June 8, 1875.

To all whom it may concern :

Be it known that I, BENJAMIN COULTER CHAMBERS, of Shady Plain, in the county of Armstrong and State of Pennsylvania, have invented certain new and useful Improvements in Lumber-Priming; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a bottom view. Fig. 3 is a vertical longitudinal section.

This invention has relation to the priming, with oil or ground color, of lumber, for the purpose of protecting the same against moisture, warping, or other injurious influences to which the raw material is subject, as also for the purpose of supplying a ground for the reception of finishing coats of color. My invention then consists, in combination with a planing-machine, or planing and matching machine, of a device constructed with a view to evenly spread on the surface of the finished lumber a coat of priming oil or color, and whose essential characteristics are a hopper for the oil or color, spreaders for the same, and scrapers and evening-brushes for finishing. The spreaders or rollers are worked by any communication of power desired, or by hand.

Referring to the accompanying drawings, A represents a box to be attached to the delivery end of a planing or matching machine, having above it the lateral hopper B for the paint or oil. Devices may, if desired, be added for grinding and mixing colors, at the option of the operator. Ordinary mechanical skill will readily suggest these and their form and position. In the bottom of the hopper B is a narrow slit, *a*, opening onto the rollers *b*. The size of the opening *a* is regulated by one or two slides, *c*, or their equivalents, operated from the ends. Immediately under the slit is a roller, *b*, which distributes the oil or color on the corrugated or grooved rollers D D', which rotate with the ridges on one re-entering the grooves on the other. This form

is adopted to prevent an excess of priming reaching the boards. Then the priming is scraped evenly and equally by the gum-scraper *d*, which is set so as to converge from both sides to a point at the middle. The object of this construction is to help to keep the board at the middle, and to collect the surplus priming at one point, as also to cause the priming to spread sidewise over the board. After passing the scraper, the board passes under the revolving brush *e*, which gives it the final smoothing and finishing necessary, after which the board passes out from the machine, and is ready for stacking. The brush *e* is rotated by a band-wheel on its axis, communicating by a band or cord with a similar wheel on the axis of the roller D'. Motion is given to the other parts by a band or pulley wheel on the roller D, or by a hand-crank on the same.

The operation is as follows: Paint or priming-oil is placed in the hopper B; the slides *c* are then drawn apart a proper distance, when the priming passes slowly down to the revolving roller *b*, which scatters it onto both rollers D D', which revolve toward one another. These permit just about the right quantity of priming to pass through to the board, which is fed in from the delivery-rollers of the planer. The board, passing along under these rollers D D', meets the rubber scraper *d*, which scrapes off all extra quantities of priming, and also gives it a further sidewise spread, and then passes under the revolving brush *e*, which finally smooths and finishes it. The board then passes on out, and is received by the operator for piling or stacking. The rollers D D', as also the roller *b*, may be of wood alone, or of wood covered with absorbent, such as cloth or felt, or of rubber, or composition. There will be a result different in degree, not in principle. The apparatus being placed on the delivery end of the planer is not in the way, and is not liable to become clogged with shavings or chips, and, the hopper being covered, the priming can be done in as clear a manner as if put on by hand-brushing, while saving all the time and labor attendant upon such a course. The device may be readily attached to any of the forms of wood-working machines, and I do not by

the foregoing description limit myself to any special form of boards or lumber cut in such machines.

Having fully described my invention, I claim—

1. The combination, with a planing, or planing and matching, machine, of a priming apparatus at the delivery end of the former, whereby the planed lumber will be fed directly from and by the planer to the primer, substantially as described.

2. In a lumber-priming machine, the combination, with the supply-trough, of the

grooved priming-roller, substantially as described.

3. The flexible scraper *d*, having the converging scraping-ridges, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of June, 1875.

BENJAMIN COULTER CHAMBERS.

Witnesses:

LEWIS O. WHITTINGER,
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