(No Model.)

G. W. MILLER.

BED FOR CLOTH PRESSING MACHINES.

No. 275,243. Patented Apr. 3, 1883.

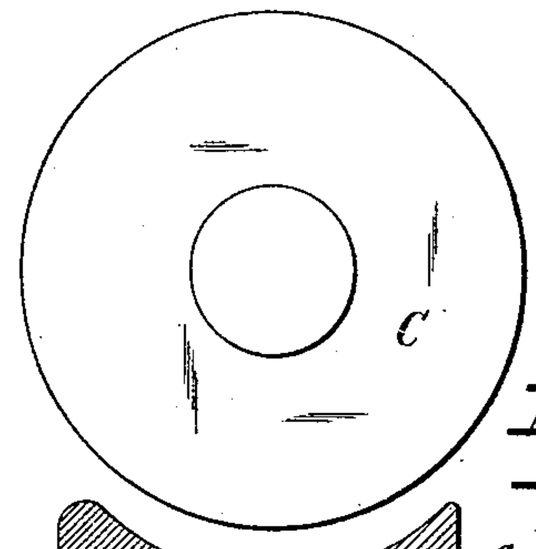


Fig. 1.

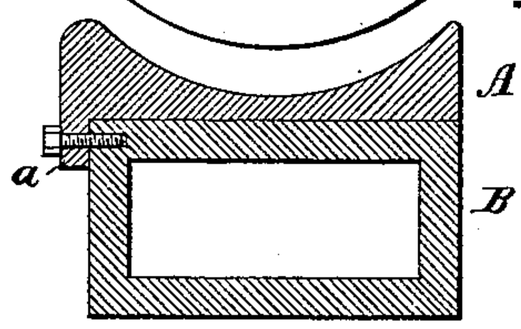


Fig. 2.

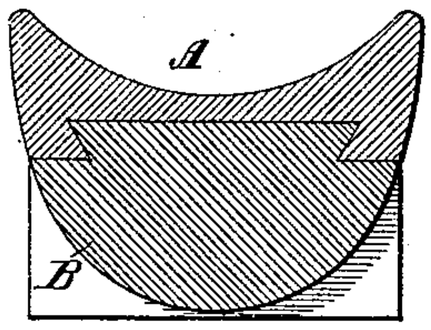


Fig. 3.

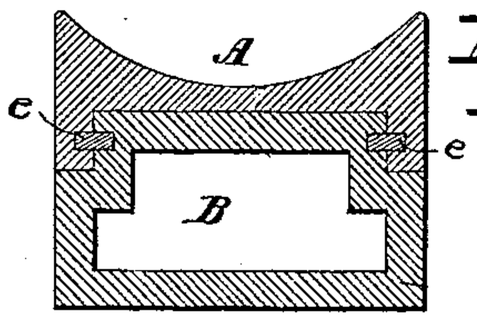
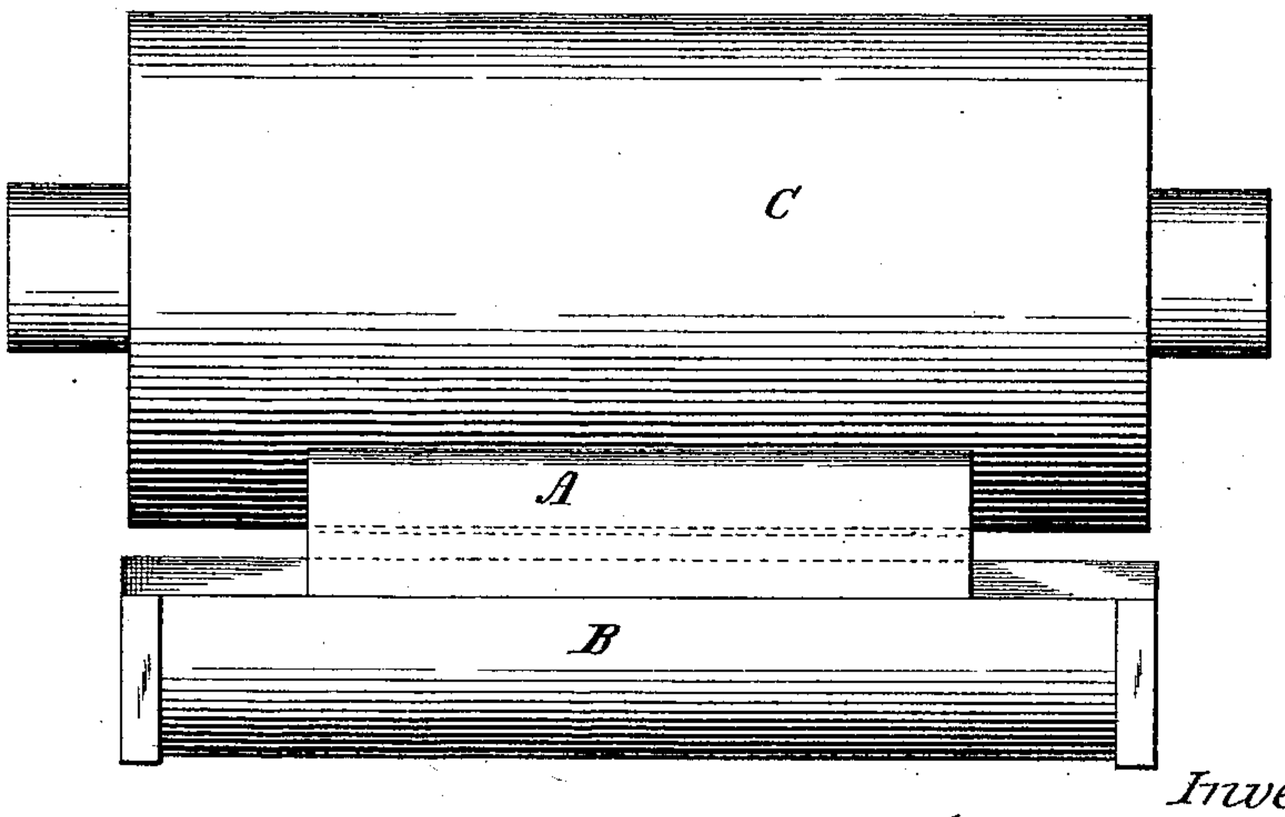


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE W. MILLER, OF WOONSOCKET, RHODE ISLAND.

BED FOR CLOTH-PRESSING MACHINES.

SPECIFICATION forming part of Letters Patent No. 275,243, dated April 3, 1883.

Application filed April 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MILLER, of Woonsocket, Providence county, State of Rhode Island, have invented certain Improvements in Beds for Cloth-Pressing Machines, of which the following is a specification.

My invention is an improved bed for machines for pressing paper, cloth, and other materials; and my improvement consists of a bed of cast metal constructed so as to be readily applied to and removed from the bed-plate, and to preserve its form under the operations to which it is subjected.

In the drawings, Figure 1 is a sectional view, showing a bed-plate, bed, and cylinder illustrating my improvement. Figs. 2 and 3 are sections showing modifications; and Fig. 4 is a side view, showing a cylinder, bed-plate, and short bed.

Heretofore in machines for pressing paper, cloth, and other materials it has been common to use with the pressing or feeding cylinder either solid beds formed in one piece with the bed-plate or to cover the latter with polished sheet-metal plates equal in length to the beds. The use of solid fixed beds is objectionable from the fact that fabrics of different widths must be treated, and that many of these fabrics—shawls, for instance—have fringes at the edges or other parts that should not be pressed. It is therefore necessary to use different machines for different widths of goods, each bed being as wide as the plain unfringed parts of the shawls to be pressed. Another objection to this construction results from the fact that in pressing narrow goods between a long plate and the corresponding cylinder the ends of the latter are apt to touch and deface the bed. Should a nail or other substance pass between the bed and cylinder the bed is defaced, and its removal results in throwing the machine out of operation. Thin flexible facing-sheets are objectionable, as they buckle under heat and pressure and present irregular faces, which injure the goods treated. I have discarded both of these plans, and use as a bed a block, A, of rigid metal or composition, the upper face curved and polished, and in connection therewith employ a bed-plate, B, (which is hollow or solid, according as the bed is to be heated or not,) constructed to permit the ready attachment and removal of the bed. The block A is shorter than the bed and projects above the face of the latter, leaving room at the ends for the fringes to lie without being pressed. Different means of attachment may be employed. In Fig. 1 I have shown bolts passing through a flange, *a*, of the bed, in Fig. 2 I have shown a dovetailed projection or rib on the bed adapted to a corresponding recess in the bed-plate, and in Fig. 3 I have shown the bed as recessed and grooved to receive a grooved rib on the bed-plate, and keys *e* for connecting the bed to the plate. In each case the bed may be readily applied and removed, and when in use co-operates with the cylinder C to press the goods.

Beds thus constructed and detachable from the supporting-plates may be used of any required length, so that in a few moments one can be substituted for another to press goods of any width. One machine may therefore be used with different classes of goods, and injury to the bed from any cause has no other effect than to delay operations during the replacing of the injured bed by another.

The rigidity of the detachable bed is a most important feature, as the shape is preserved, there is no buckling, as with thin covering-sheets, and any expansion or contraction does not impair the uniformity of the pressing-surface.

I claim—

1. The combination, in a pressing-machine, of a rotating cylinder with a fixed bed-plate and a rigid metal bed, connected detachably to the bed-plate, shorter than the latter and extending above the face thereof, substantially as set forth.

2. The combination, in a pressing machine, of a fixed bed-plate with a rotating cylinder and detachable bed, the bed-plate being constructed, as described, to afford a pressing-surface above shorter than that of the bed, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. W. MILLER.

Witnesses:

IRAM J. TOTHIN,

JAMES E. COOK.