J. KLEIN & J. PHILLIPS.

PAPER-CLAMP.

No. 178,532. Patented June 13, 1876.

Fig. 1.

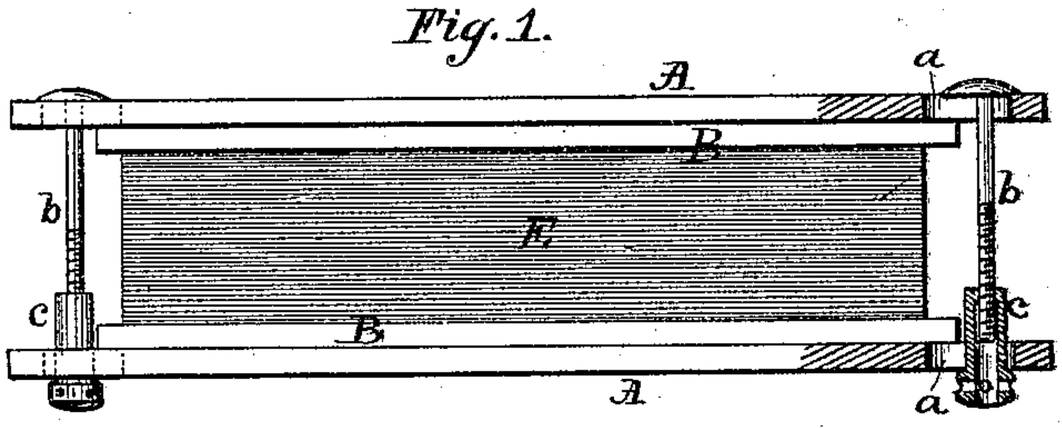
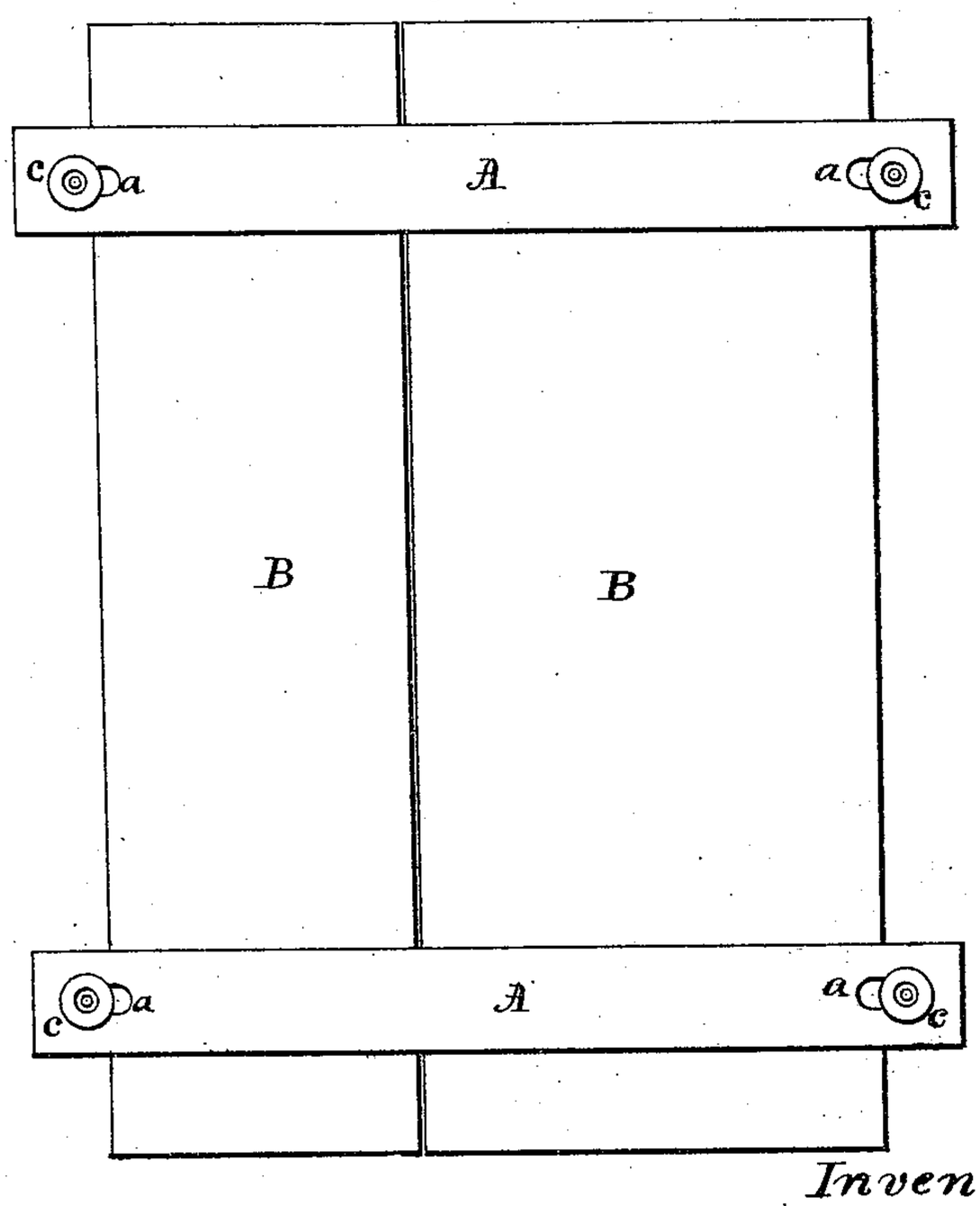


Fig. 2.



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UNITED STATES PATENT OFFICE.

JACOB KLEIN AND JAMES PHILLIPS, OF ST. LOUIS COUNTY, MISSOURI.

IMPROVEMENT IN PAPER-CLAMPS.

Specification forming part of Letters Patent No. **178,532**, dated June 13, 1876; application filed February 26, 1876.

To all whom it may concern:

Be it known that we, JACOB KLEIN and JAMES PHILLIPS, of St. Louis county, State of Missouri, have invented an Improvement in Paper-Clamps, of which the following is a specification:

The nature of our invention consists in closely and compactly packing paper by means of bolts, sleeves, and clamps for shipment, so that it will not absorb dampness, and will not be subject to injury by external bruises, but will remain intact until the bolts, sleeves, and clamps are removed.

To explain more clearly the manner in which said packing is done, reference is had to the annexed drawing, with letters marked thereon, in which drawing Figure 1 is an end view of our improved device for packing paper for shipment, and Fig. 2 is a top view of the same.

In Fig, 1, A A are two clamps, made of wood or other material, with two oblong slots, *a a*, in the end of said clamps. The object of the oblong slots is to adapt them to different-sized paper. These slots are provided with common bolts *b b*, which have sleeves *c c*, open at both ends, so that the bolts may run through. These, being long and in the shape of sleeves, instead of common nuts, prevent oscillation of the clamps A A. They (the sleeves and the bolts) have large heads, so as to prevent them from passing through the clamp at the slots. B B are boards to protect the sides of the paper from injury, and to hold the paper intact in all parts, and from their natural elasticity to press it tighter at the edges than other parts, so as to secure it and make it perfectly impervious to water and dampness. These boards may be made of wood, or other material which will answer the purpose.

We take the clamps, two or more in number, and, after inserting the bolts in the slots of each, put them on the table or floor, and on top of them we then place the boards B B, which may be one or more, and on these we carefully lay the paper; then on top we put the boards B B, which may be one or more in number, and on top of these we lay the clamps A A, similar, and the counterparts of the first ones placed on the table, with their sleeves, as above described, already inserted in the slots, and then screw the sleeves tightly down, all at the same time, so that the paper may be gradually compressed and equally compressed, until the edges of the paper (marked E) are compressed so tightly that they will be impervious to dampness and water, and the package is ready for shipment.

It will be remembered that the boards are made thicker at the edge than in the center, so as to have little or no elasticity, and the centers thinner, gradually tapering off to the thickness of the edge. The clamps are made strong, so as to be susceptible of little or no elasticity. Thus the edges of the paper are held tighter than the central portions.

Now, what we claim, and for which we ask Letters Patent of the United States to be granted us, is—

The clamps A A A A, provided with the slots *a a a a*, in combination with the boards B B, bolts *b b b b*, and sleeves *c c c c*, substantially as and for the purpose set forth.

JACOB KLEIN.
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