

C. CLARK.

Packing Devices for Paper-Folding Machines.

No. 141,491.

Patented August 5, 1873.

Fig. 1.

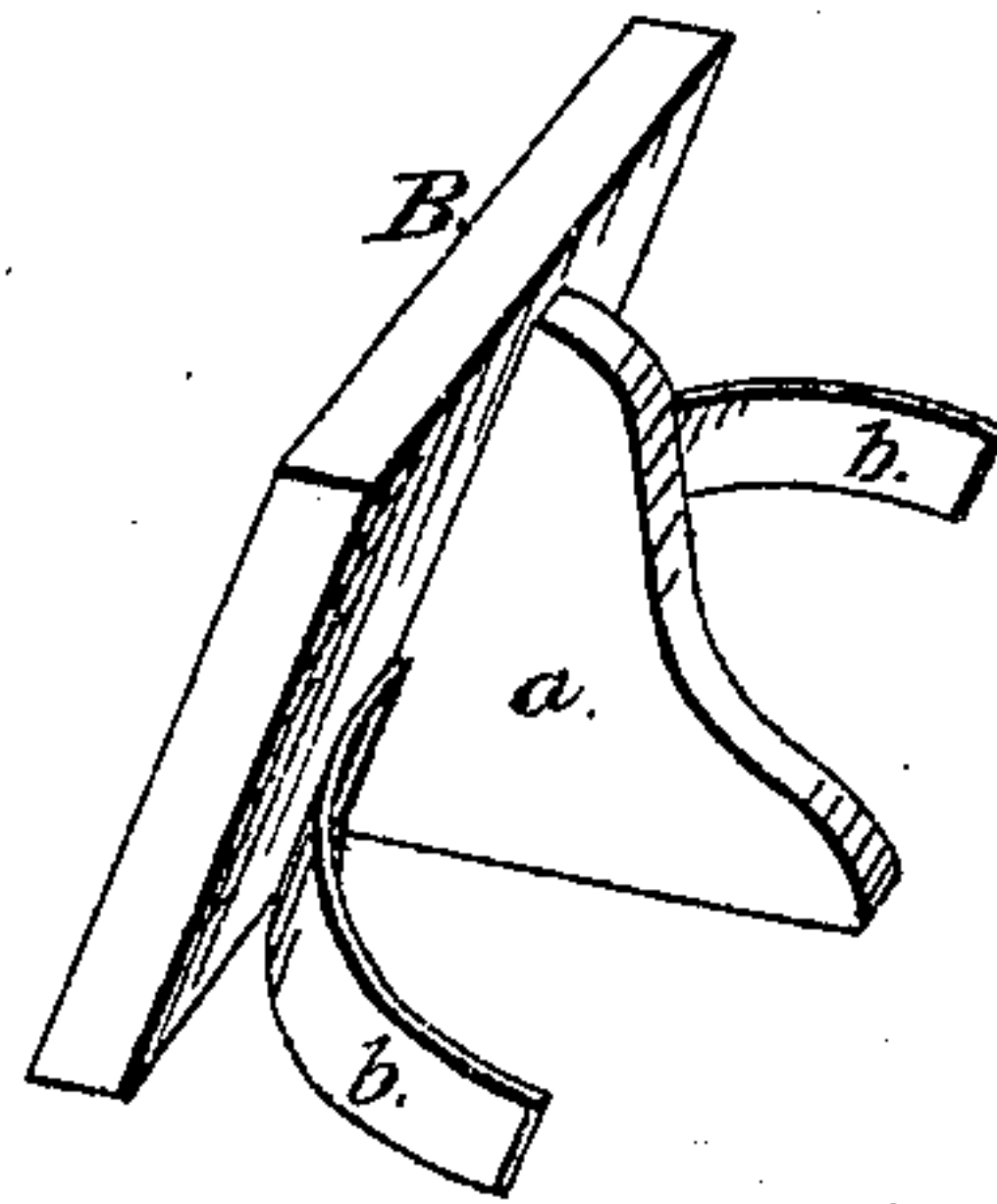


Fig. 2.

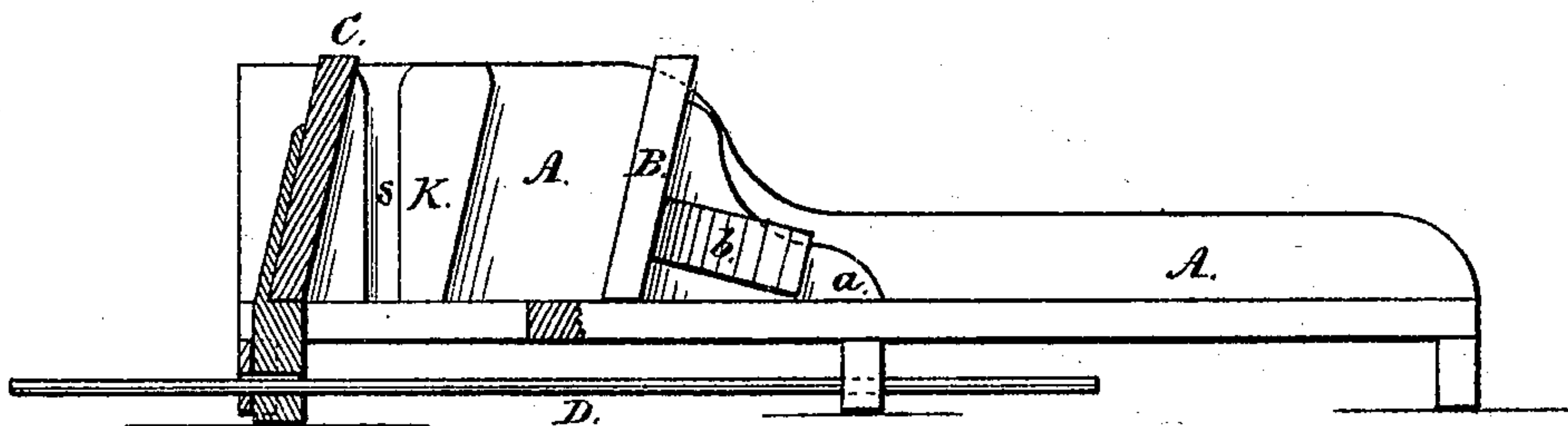
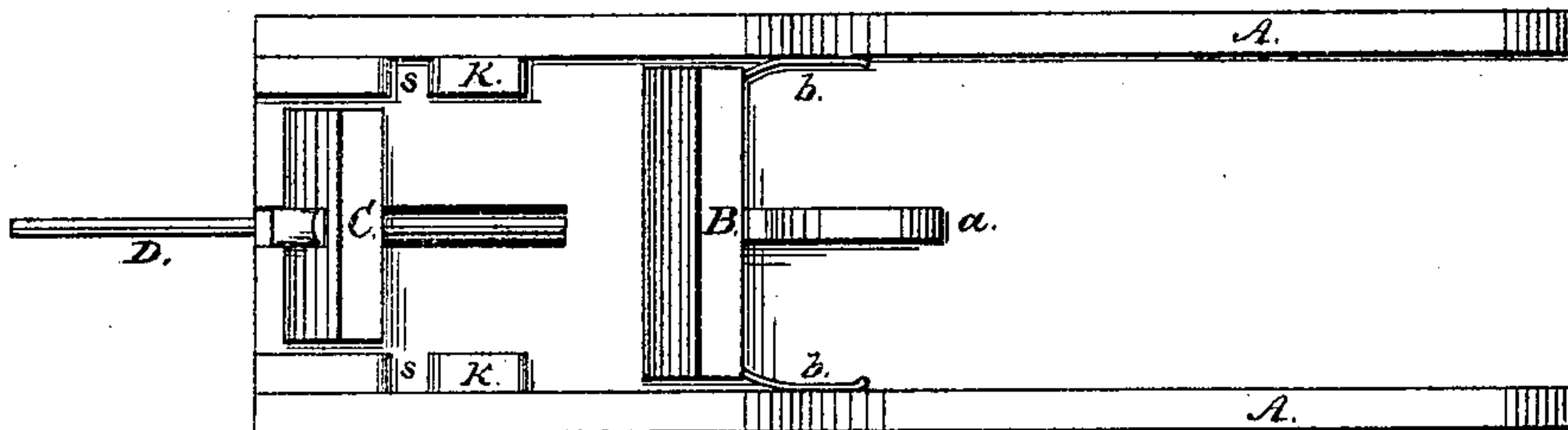


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN PACKING DEVICES FOR PAPER-FOLDING MACHINES.

Specification forming part of Letters Patent No. **141,491**, dated August 5, 1873; application filed  
May 10, 1873.

*To all whom it may concern:*

Be it known that I, COOPER CLARK, formerly of Philadelphia, Pennsylvania, now of New York, N. Y., have invented an Improved Packing Device for Folding-Machines; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the sliding back board. Fig. 2 is a longitudinal vertical section of the packing-trough with the reciprocating plunger and sliding back board in place. Fig. 3 is a plan of the same.

This improvement consists in giving to the reciprocating plunger and to the back packing-board an inclination from the vertical line, as represented in the drawings.

When wet, limp, soft, or thin paper is used the sheet, when folded, in some cases, has not sufficient rigidity to support its own weight, and doubles down badly, making very imperfect work. This is particularly the case when the sheet receives but a single fold.

By giving to the back board and plunger a suitable inclination the yielding paper is enabled to lean against a supporting surface, which counteracts its tendency to double, and enables it to be packed with the same facility as stiffer paper.

In the drawing, A marks the packing-trough of the usual form employed in the Chambers folding-machines; B, the sliding back board supported at the desired inclination of the bracket *a*, and retarded in its movements by the frictional springs *b*, which bear against the sides of the trough. C is the reciprocating plunger, having the same inclination as the back board B. It is attached to the rod D and operated in the usual manner. *s* is the

slit, into which the folded sheet falls from the folding-machine. K marks the inclined stationary catches.

The operation is as follows: The folded sheet falls into the slit *s* and is packed by the plunger against the inclined back board B, which supports it in the manner before described. The stationary catches K, which are used to prevent the retrograde movement of the sheets during the back movement of the plunger C, are shown in Figs. 2 and 3. Their location is such as to adapt them to co-operate properly with the inclined plunger and back board in packing the sheet. They have the same inclination to the bottom of the trough as the plunger and back board, and hold the paper, when packed, at that angle.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with the packing-box of a folding-machine, the inclined reciprocating plunger C, constructed and operating as described.

2. The inclined back board B, made as described, for conjoint operation with the plunger C in the packing-box of a folding-machine, in the manner and for the purpose specified.

3. The inclined catches K, having the same inclination to the packing-trough as the plunger and back board, and operating to hold the packed sheets at that angle, as specified.

The above specification of my said invention signed and witnessed at New York this 25th day of February, A. D. 1873.

COOPER CLARK.

Witnesses:

EZEKIEL DELANO,  
JAMES HENNESSEY.