

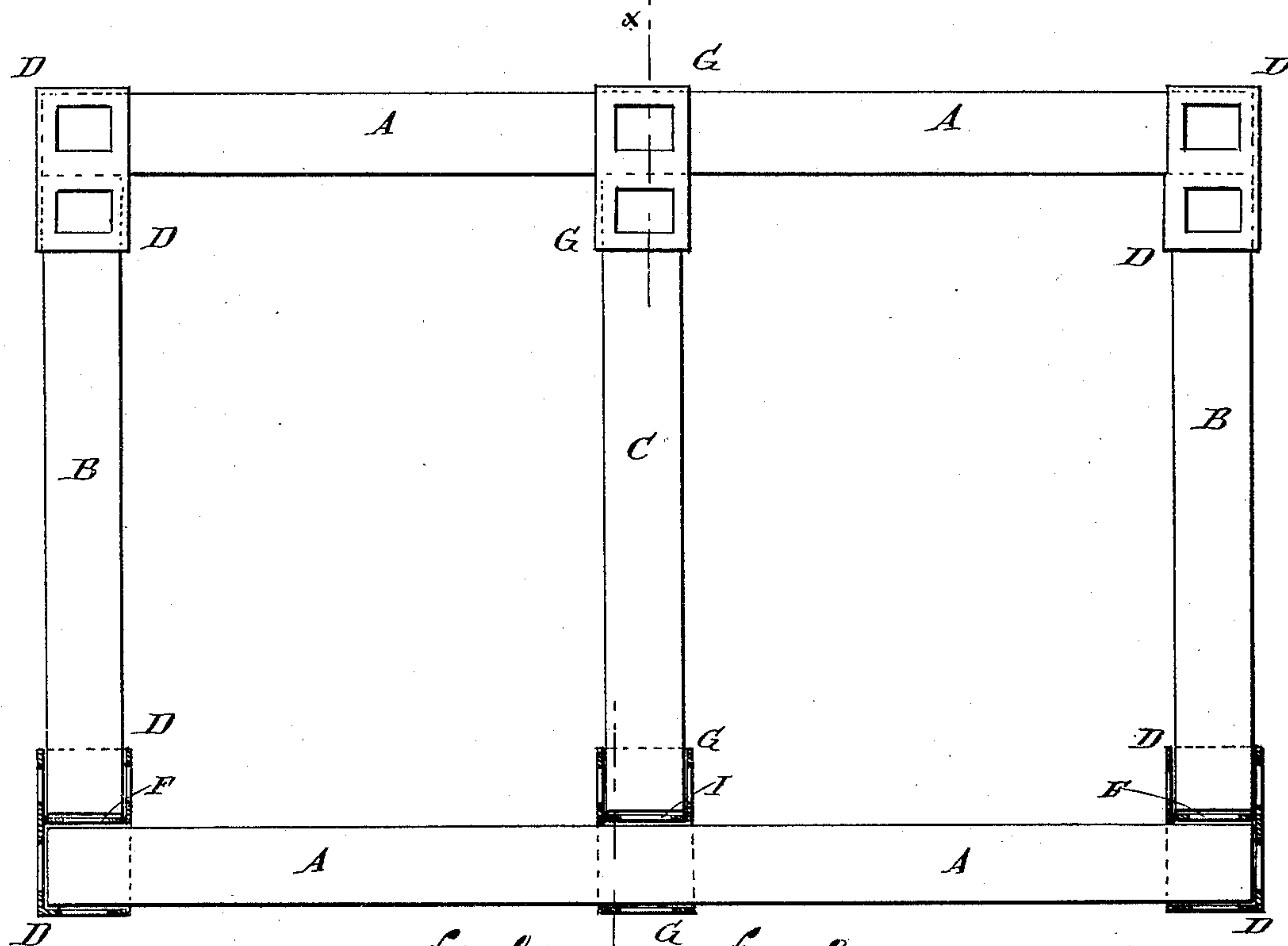
(No Model.)

C. F. SPAULDING.  
PACKING FRAME FOR PAPER.

No. 353,471.

Patented Nov. 30, 1886.

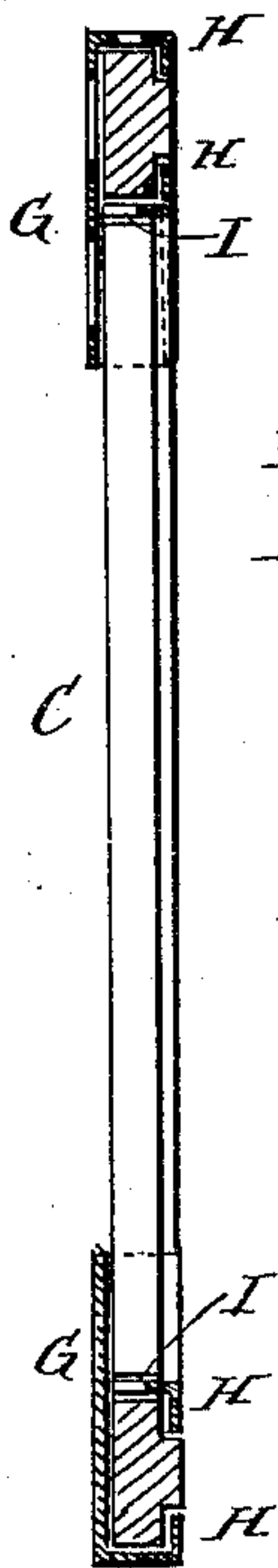
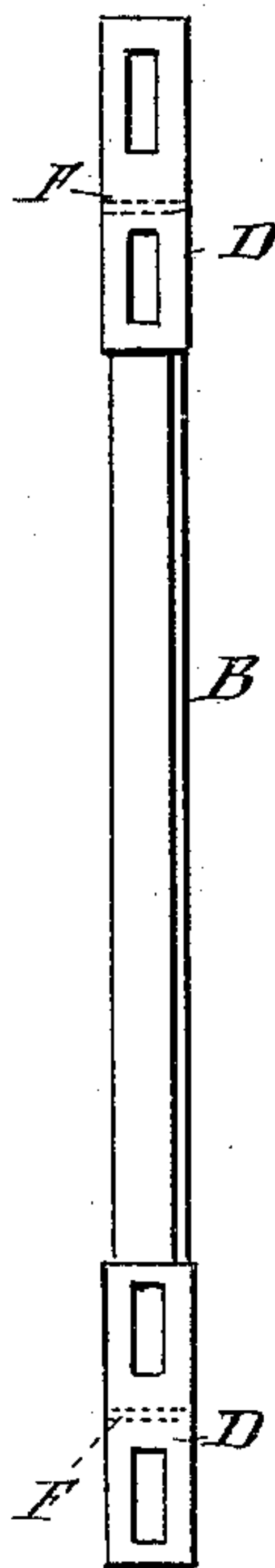
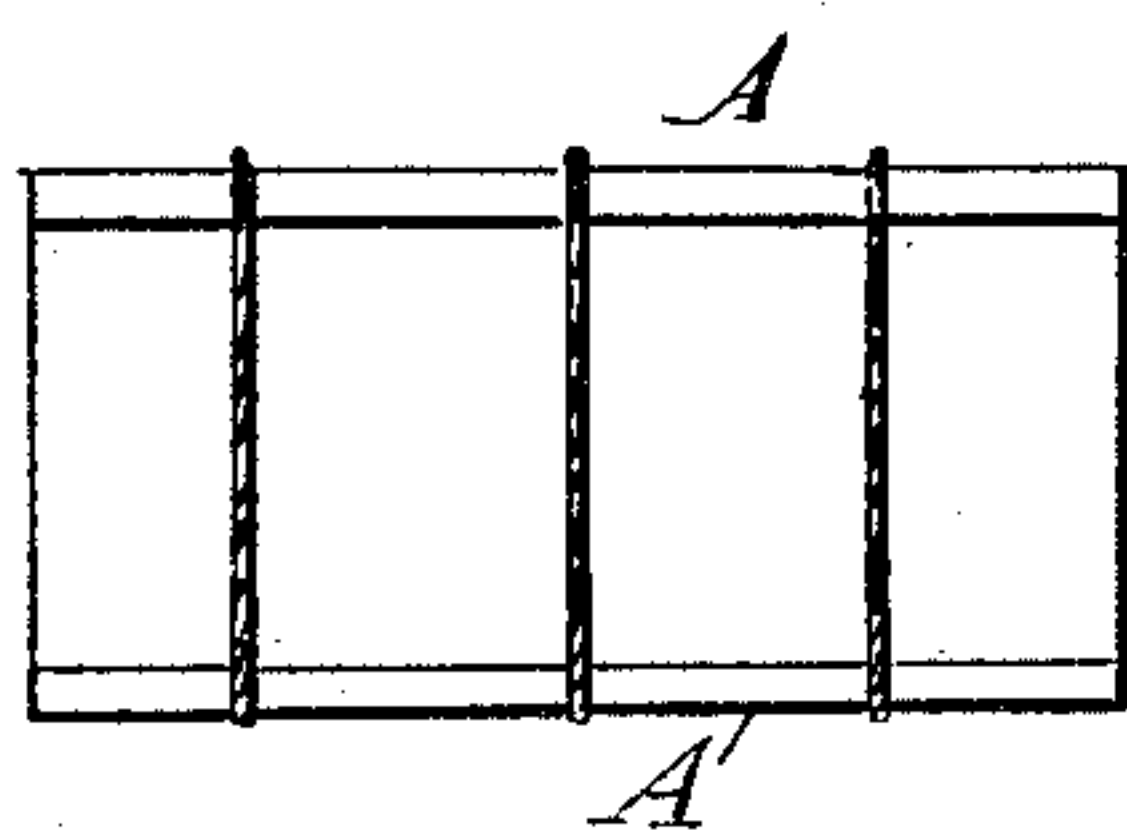
*Fig. 1.*



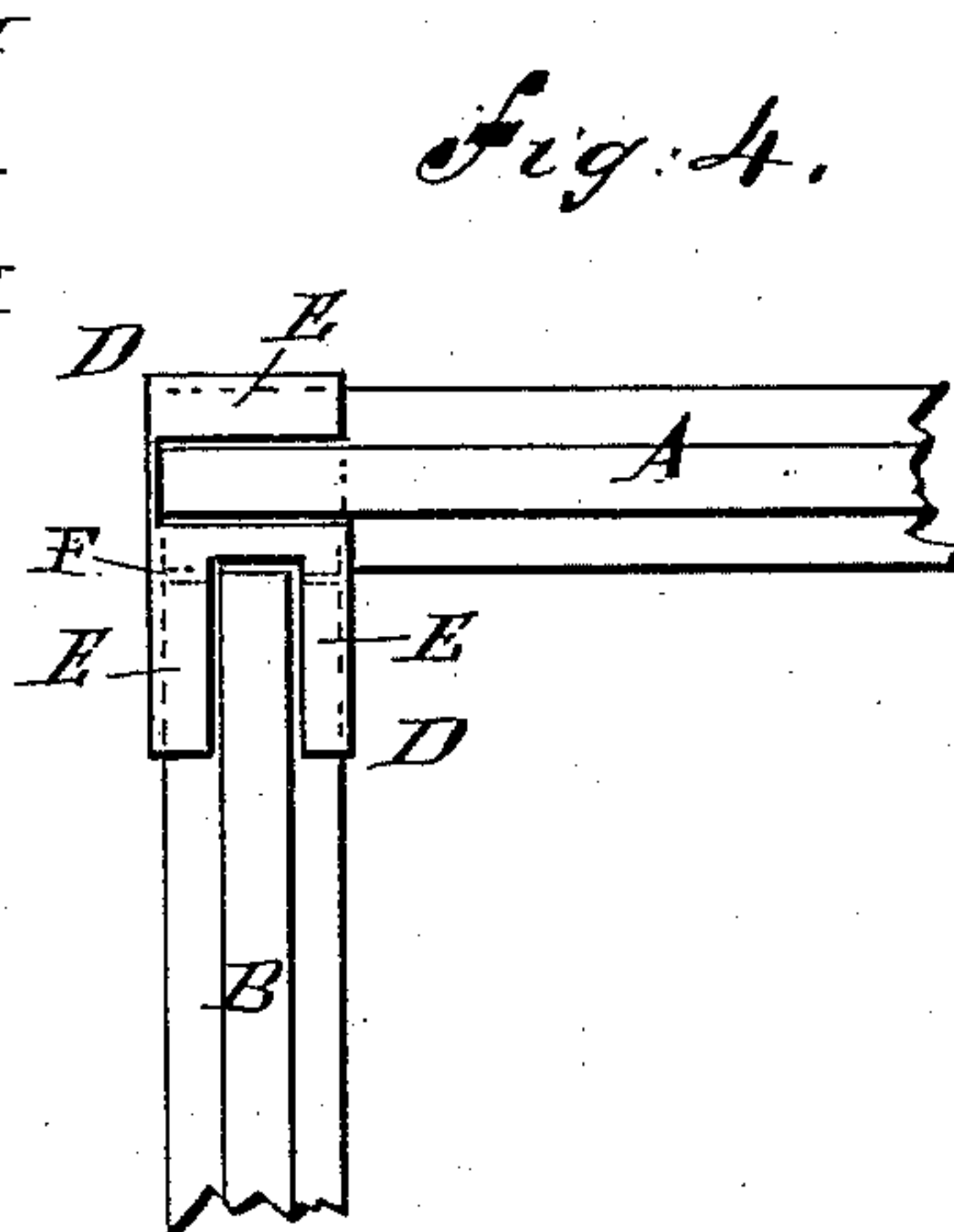
*Fig. 2.*

*Fig. 3.*

*Fig. 5.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

CHARLES F. SPAULDING, OF ELIZABETH, NEW JERSEY.

## PACKING-FRAME FOR PAPER.

SPECIFICATION forming part of Letters Patent No. 353,471, dated November 30, 1886.

Application filed May 1, 1886. Serial No. 200,824. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES F. SPAULDING, of Elizabeth, in the county of Union and State of New Jersey, have invented a new and useful Improvement in Knockdown Frames for Bundles of Paper, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of one of my improved knockdown frames, partly in section. Fig. 2 is an end elevation of the same. Fig. 3 is a sectional end elevation of the same, taken through the line *xx*, Fig. 1. Fig. 4 is a plan view of the inner side of one corner of the frame. Fig. 5 is an edge view of a bundle of paper to which my improved frames have been applied.

The object of this invention is to provide knockdown frames for bundles of paper, constructed in such a manner as to prevent the binding-cords from marring the edges of the paper, and which, when detached from the bundles, can be packed in small space for re-shipment to the paper-mills.

The invention consists in the construction and combination of various parts of the frame, as will be hereinafter fully described, and then claimed.

A represents the side bars of the frame, which are made of the same length as the bundles of paper to which they are to be applied. B are the end bars, and C is the intermediate bar of the frame, which bars B C are made of a length equal to the width of the bundles of paper to which they are to be applied, less the width of the side bars, A.

The bars A B C are made of such a width and thickness as will give them sufficient strength to withstand the pressure of the binding-cord.

The ends of the end bars, B, are connected with the ends of the side bars, A, by metallic couplings D, which have longitudinal sockets in one end, to receive the ends of the end bars, B, and transverse sockets in the sides of their other ends, to receive the ends of the side bars, A. The under sides of the sockets in the corner couplings, D, have their middle parts slotted, forming flanges E, which fit into rabbets

in the side edges of the under sides of the bars A B, the said rabbets being made of such a depth that the under sides of the said couplings D will be flush with the under sides of the said bars A B.

The couplings D have inwardly-projecting flanges F at the inner ends of the longitudinal end sockets, for the ends of the end bars, B, to abut against.

The ends of the intermediate bars, C, one or more of which can be used, as the size of the bundles of paper may require, are connected with the side bars, A, by metallic couplings G, which have longitudinal sockets in one end to receive the ends of the bar C, and transverse openings in their other ends to receive the side bars, A.

The middle parts of the under sides of the intermediate sockets, G, are slotted, forming flanges H, which fit into rabbets in the side edges of the under sides of the bars A C, the said rabbets being made of such a depth that the under sides of the said couplings G will be flush with the under sides of the said bars A C.

The couplings G have inwardly-projecting flanges I at the inner end of the longitudinal end sockets for the ends of the bar C to rest against.

The outer sides and the edges of the couplings D G may have openings formed through them, to lessen the quantity of metal used in their construction and the consequent weight, while leaving them sufficient strength to withstand the pressure and the knocks to which they may be exposed.

With this construction the under surfaces of the knockdown frames will be smooth, so that they will not mar the paper, and the said frames, when detached from the bundles, can be packed in small space and reshipped to the paper-mills, to be again used.

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

1. In a knockdown frame for bundles of paper, the combination, with the ends of the side bars, A, and end bars, B, having rabbeted under sides, of the metallic couplings D, having longitudinal end sockets and transverse side sockets, and provided with flanges E on their under sides, to enter the rabbets of the said bars, substantially as herein shown and



described, whereby the said bars are detachably connected, as set forth.

2. In a knockdown frame for bundles of paper, the combination, with the side bars, A, and the intermediate bar, C, having rabbeted under sides, of the metallic coupling G, having longitudinal sockets at one end and transverse openings at their other ends, and provided with flanges H on their under sides, to

enter the rabbets of the said bars, substantially as herein shown and described, whereby the said bars are detachably connected, as set forth.

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Witnesses:

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