

No. 683,011.

Patented Sept. 17, 1901.

J. BOWERS.

SECTIONAL POST FOR BINDERS.

(Application filed Apr. 20, 1901.)

(No Model.)

Fig. 1.

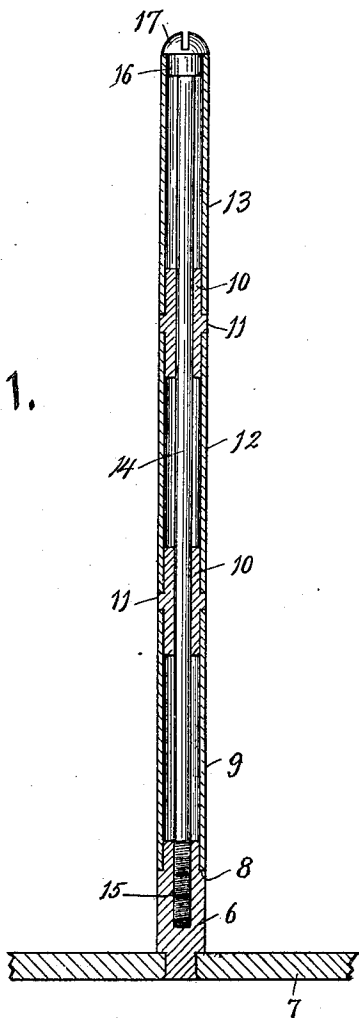


Fig. 2.



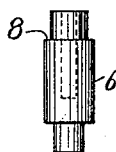
Fig. 5.



Fig. 3.



Fig. 4.



Witnesses.

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JOHN BOWERS, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO HENRY C. MILLER AND JULIUS BAUER, COPARTNERS, OF SAME PLACE.

SECTIONAL POST FOR BINDERS.

SPECIFICATION forming part of Letters Patent No. 683,011, dated September 17, 1901.

Application filed April 20, 1901. Serial No. 56,697. (No model.)

To all whom it may concern:

Be it known that I, JOHN BOWERS, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Sectional Posts for Binders, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in sectional posts for binders, more especially the type of binders known as "transfer-binders."

In transfer and other forms of binders, in which leaves are detachably secured between the covers of the binder, posts are employed for holding said leaves detachably, said posts passing through openings formed therefor in the leaves. If no means were provided for extending the lengths of the posts, said posts would of course be only capable of accommodating a certain number of leaves, and hence sectional posts have been provided in order that their lengths may be increased as the thickness of the leaves between the covers require. My invention has relation to this class of sectional posts; and its object is to provide a simple and improved form thereof which shall be inexpensive and at the same time the parts thereof capable of being readily adjusted together or disconnected from each other.

With the above primary object and other incidental objects in view the invention consists of the devices and parts or their equivalents, as hereinafter set forth.

In the accompanying drawings, Figure 1 is a vertical sectional view of a sectional post embodying my invention, the lower end of said post being shown as riveted to the usual metallic piece which fits in the rear binding-strip of the cover. Fig. 2 is a sectional detail view of one of the tubular sections. Fig. 3 is a detail view of one of the coupling-pieces. Fig. 4 is a detail view of the lower section of the post shown in Fig. 1, and Fig. 5 is a detail view of a longer lower post-section with a cap-piece adjusted thereto.

Referring to the drawings, the numeral 6 indicates the lower post-section. (Shown in Figs. 1 and 4.) The lower end of this section

is reduced and fits in an opening therefor in a metallic strip 7, which is incased in the rear binding-piece of the side or cover of the binder, as is usual in devices of this character, the said lower reduced end being shown as riveted to the metallic strip, although, of course, if preferred, the opening in said metallic strip could be threaded and said lower end of the post-section provided with exterior threads to engage the threaded opening, and thereby providing for the removal of the lower section. The upper end of said lower post-section is also reduced to form an annular shoulder 8. Adapted to fit around this upper reduced end and to rest upon the shoulder 8 is a tubular post-section 9.

The numeral 10 indicates a tubular coupling-piece provided medially with an exterior annular shoulder 11. The portion of this coupling below the shoulder 11 is fitted in the upper end of the tubular section 9, the upper end of said section 9 bearing against the said shoulder. The portion of this coupling above the shoulder 11 fits in the lower end of another tubular post-section 12, the lower end of said post-section resting on the upper side of the shoulder 11. Fitting in the upper end of the post-section 12 is a similar coupling 10, the shoulder 11 thereof resting on the upper end of the section 12. The lower end of an upper tubular post-section 13 fits around the upper portion of this upper coupling 10, and its lower extremity rests on the shoulder 11.

The several parts described are held together by means of a long rod 14, which passes through the tubular sections and fits closely within the bores of the couplings, said couplings thereby forming bearings for the rod. The lower end of the rod is threaded, and this threaded end engages a threaded socket 15 in the lower section 6. The rod near its upper extremity is provided with a circular enlargement 16, which fits closely within the bore of the upper tubular post-section 13, and thereby forms a bearing at that point. The upper extremity of the rod is provided with a head 17, which bears against the upper end of the upper tubular post-section, and thereby firmly binds all the several parts together. This head is advisably provided with a niche

for the insertion of a screw-driver, so as to adapt the lower end of the rod to be readily screwed into or out of the threaded socket 15.

As is well understood by those familiar with this class of devices, the upper ends of the posts pass freely through openings in the rear binding-piece of the other cover or side of the binder, (not shown,) and a metallic piece similar to 7 is incased in said rear binding-piece, the said strip having openings therethrough for the passage of the posts, whereby the upper cover of the binder is permitted to be brought down on top of the series of leaves inclosed between the covers.

In the accompanying drawings I have shown a post built up of three of the tubular post-sections and two of the couplings. It is obvious, however, that a greater or less number maybe employed, if desired, the only requirement being that a series of rods 14 be provided of varying lengths, so as to be adapted to the different lengths of the posts. If only one tubular post-section is used, then the coupling 10 is omitted altogether and a very short rod 14 employed, the head 17 of said rod resting on the top of the section 9. If only two tubular sections are employed, then only one coupling 10 is required, the said coupling being disposed between the upper end of section 9 and the lower end of section 12. The rod in that case is of such length that its head 17 will rest on top of the tubular section 12. If more than three tubular sections are employed, then another coupling 10 is fitted to the upper end of the tube-section 13 and to the lower end of another tube-section, and a rod 14 is employed of such length that its head 17 will fit against the upper end of the uppermost tube-section.

Some users may prefer to have the device equipped in the first instance with a lower post-section of greater length than the post-section 6. (Shown in Figs. 1 and 4.) In such cases a post-section similar to that shown in Fig. 5 and designated by the numeral 18 may be connected to the metallic strip 7. This post is adapted to be used until the leaves reach the top thereof, and during that time its upper end is finished off by a cap 19, fitted thereto and having a depending flange, the lower end of which rests on the upper shoulder of said post-section. When the leaves

reach the top of the post, the cap is then removed and the height of the post built up in a similar manner to the post shown in Fig. 1.

From the foregoing description it will be seen that I provide a sectional post which is exceedingly simple in construction and inexpensive of production and at the same time one which possesses the greatest rigidity throughout, the several sections being held firmly together by the rod 14, which rod has the threaded bearing at its lower end, the intermediate bearings by reason of its close fit in the bores of the couplings, and a bearing at its upper end by the engagement of the enlargement 16 with the bore of the upper tubular post-section.

While the different post-sections and couplings are shown in the accompanying drawings as of cylindrical form, yet it is not intended that these parts should be restricted to that particular formation, inasmuch as the same could be made square, rectangular, or any other desired form in cross-section.

What I claim as my invention is—

In a sectional post for loose-leaf binders, the combination of a base-section provided with a threaded socket and also provided with a shoulder, a plurality of tubular post-sections, the lower end of the lower tubular post-section fitting the upper end of the base-section and against the shoulder thereof, a tubular coupling-piece fitting within the adjacent ends of two of the tubular post-sections, said coupling-piece provided with an external shoulder against which the said adjacent ends of the tubular post-sections bear, the outer surface of the shoulder being flush with the outer surfaces of the tubular post-sections and a rod passing through the tubular post-sections and fitting closely in the bore of the coupling, the lower end of said rod having a threaded connection with the socket of the base-section, and the opposite end of said rod provided with a head fitting against the upper end of the upper tubular post-section.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN BOWERS.

Witnesses:

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ANNA V. FAUST.