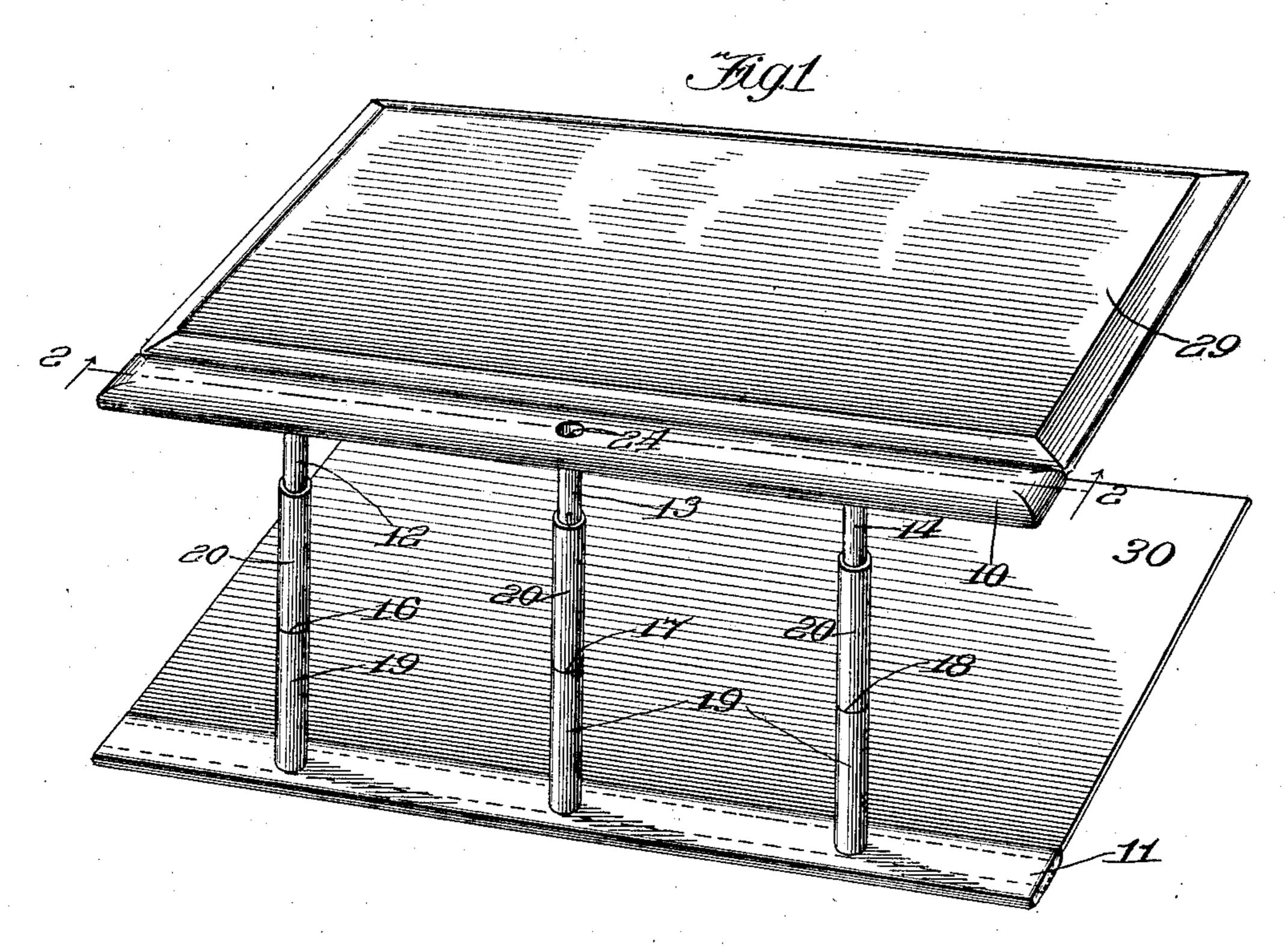
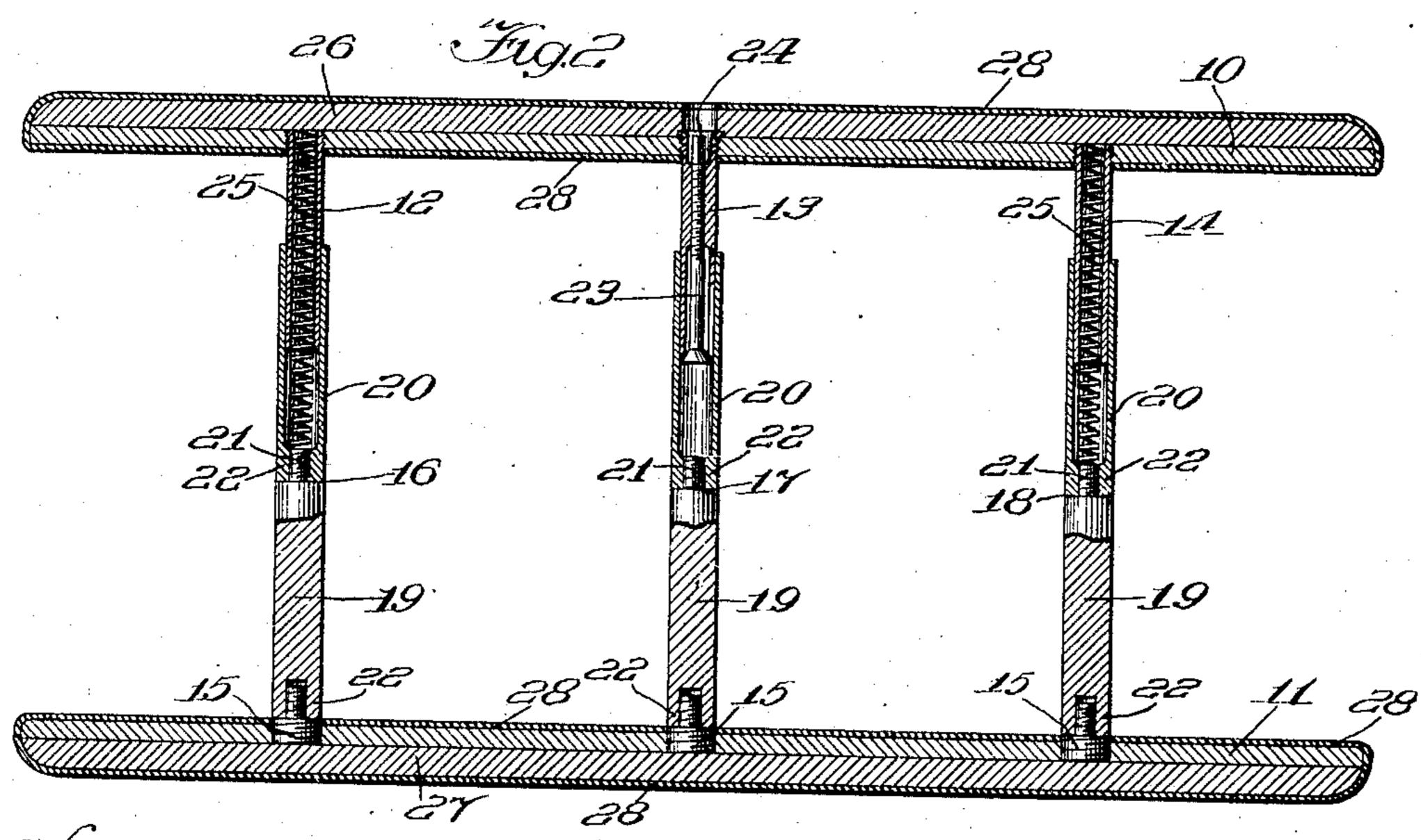
E. A. TRUSSELL. LOOSE LEAF BINDER. APPLICATION FILED JULY 21, 1905.





Witnesses.
Zbriv X, Jagle.

Cha B. Gilla.

Inventor:
Emory A. Trussell.

by

Leester

UNITED STATES PATENT OFFICE.

EMORY A. TRUSSELL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO SIEBER & TRUSSELL MANUFACTURING COMPANY, A CORPORATION OF MISSOURI.

LOOSE-LEAF BINDER.

No. 859,633.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed July 21, 1905. Serial No. 270,697.

To all whom it may concern:

Be it known that I, EMORY A. TRUSSELL, a citizen of the United States, and a resident of St. Louis, State of Missouri, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to loose leaf binders of that class in which the sheets to be bound are compressed between pressure or binding plates having telescoping leaf-holding posts.

Heretofore, in binders of this class, the range of usefulness has been limited owing to the fact that the
sheets to be bound, in order to be gripped between the
pressure plates, must be sufficiently numerous to render the thickness of the bound volume somewhat
greater than the length of one member of the telescoping posts, while the greatest number of sheets which
can be bound is limited by a maximum thickness of
the volume less than the combined lengths of the two
telescoping members of the filing posts.

This invention has for its object, therefore, to provide increased capacity in a binder which may also be used for binding only a small number of sheets, and contemplates means whereby the leaf-holding posts are made longitudinally extensible, as will hereinafter appear.

The invention consists in the structure to be herein-after described, and claimed, and which is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a binder embodying the invention; and Fig. 2 is a longitudinal section on the line 2—2 of Fig. 1.

In carrying out the invention there is provided the usual binding plates 10 and 11, which are preferably made of metal and are adapted to rigidly support the telescoping posts. To the plate 10 there is applied a set of one of the members of the telescoping posts, 12, 13 and 14, these being secured to the binder plate in any of the ways usually employed for this purpose, as by screw-threads, as shown. The other binding plate, 11, is provided with a plurality of stude 15, also shown as having a screw-threaded engagement with the material of the plate, and adapted to receive a set of the complementary post members 16, 17, 18. These latter post members are sectional, each comprising a shank 19, adapted to be secured to the stud 15, and a head 20 for telescopically engaging the corresponding post member of the other binding plate. The sections 19 and 20 are detachably connected in any desired manner, the 50 connection being preferably, however, identical in form with that between the stud 15 and the shank 19,

and so disposed that the telescoping head 20 may be applied directly to the stud 15 when the shank 19 has been disconnected from both, if desired. As shown intercalating parts 21, 22, having a threaded engage- 55 ment, are provided for each of these connections.

Any form of locking means may be employed for securing the parts of the binder in position when the binding plates have been compressed upon its contents. As shown in the drawings, one of the smaller post members, 60 as 13, may be provided with an expander bolt 23, of ordinary construction, and adapted to expand the end of the post member so that it may be made to engage the interior of the opposite post member with sufficient friction to prevent movement between the parts. The 65 outer end 24 of the expander bolt is squared to receive a suitable key (not shown). Coil springs 25 are housed within the posts 12 and 14 for automatically separating the binding plates when the locking mechanism has been released.

Preferably the binding plates 10 and 11 are backed with strips of wood 26, 27, to give them a convenient shape, and both are covered with cloth or leather, 28, which is extended over suitable side members 29, 30, applied to the edges of the binding plates, the covering 75 material serving as a hinge connection between the two.

The device may be used as a binder for loose leaves in the ordinary way, when, however, only a small number of sheets are to be bound the shanks 19 of the tele- 80 scoping post members 16, 17, 18 will be removed and the head portion 20 of each applied directly to the studs 15. It will be understood, therefore, that a binder is obtained which has the capacity for receiving a large number of sheets but which may also be conveniently 85 used for binding a much smaller number of sheets. Obviously the capacity of the binder may be still further increased by duplicating the shank members 19 of the sectional post 16, 17, 18.

While I have shown only the outer or inclosing tele- 90 scoping post members 16, 17, 18, as being sectional, the inner or smaller members, as 12, 13, 14, might also be so made without departing from the spirit of the invention.

I claim as my invention—

1. In a loose leaf binder, in combination, a pair of binder plates; a plurality of posts fixed in one of said plates; a plurality of studs set in the other of said plates; and rods telescopically engaging the posts and detachably engaging the studs, such rods being sectional, the outer 100 section thereof being attachable to the studs when the inner section is removed.

2. In a loose leaf binder, in combination, a pair of

binder plates; a plurality of posts fixed in one of said plates; a plurality of threaded studs set in the other of said plates; and rods telescopically engaging the posts and having threaded sockets for engaging the studs, such rods being sectional, their sections being united by means of threaded tenons and sockets identical in size with the studs and the sockets engaging them.

3. In a loose leaf binder, in combination, a pair of binder plates; a plurality of posts fixed in one of said

plates; a plurality of studs set in the other of said plates; 10 rods telescopically engaging the posts and detachably engaging the studs; and means for locking the telescoping members in an adjusted position.

EMORY A. TRUSSELL.

Witnesses:
E. M. KLATCHER,
LOUIS K. GILLSON.