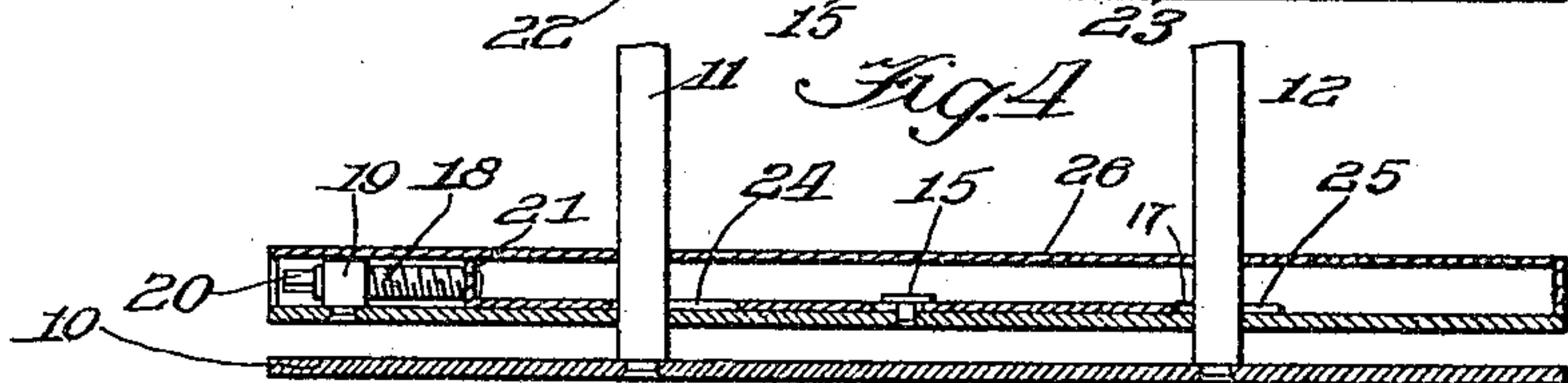
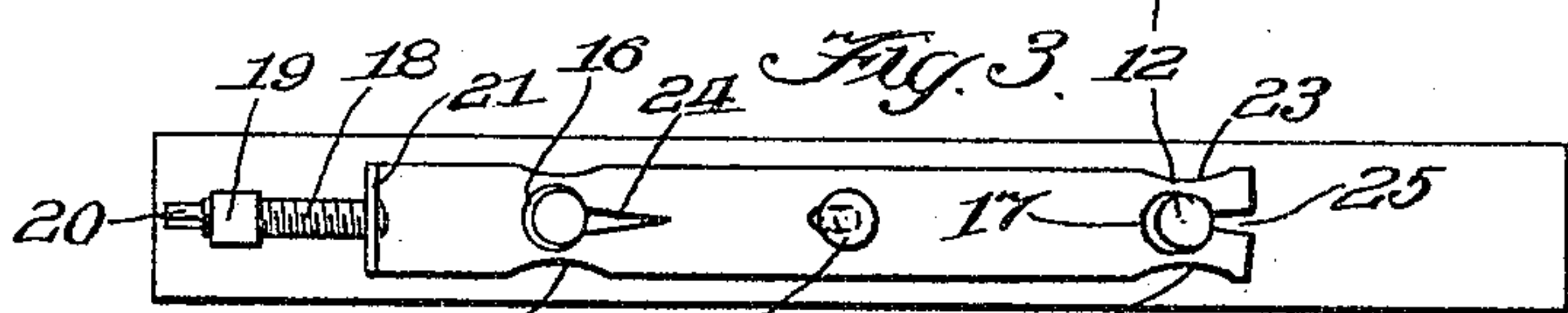
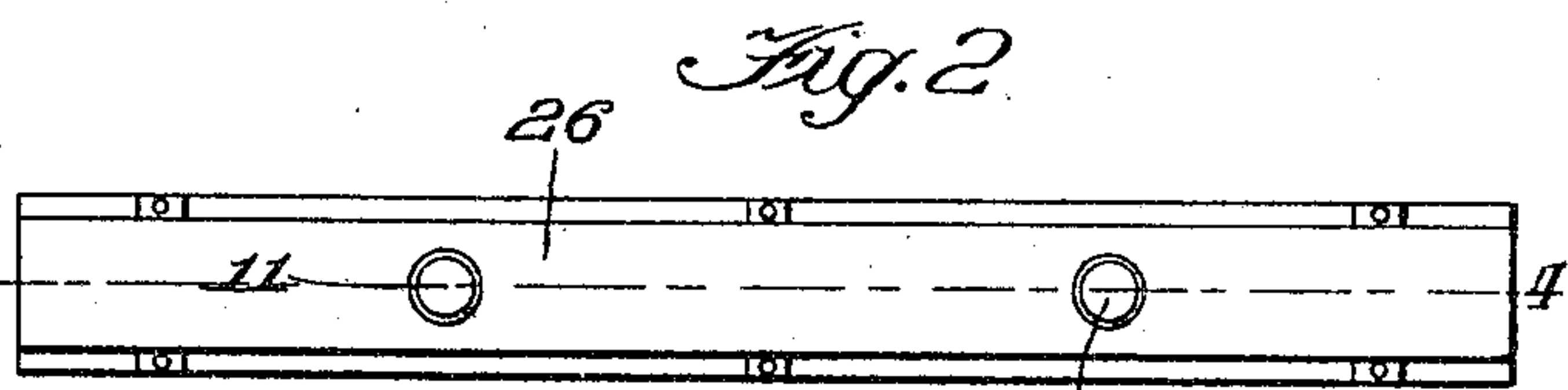
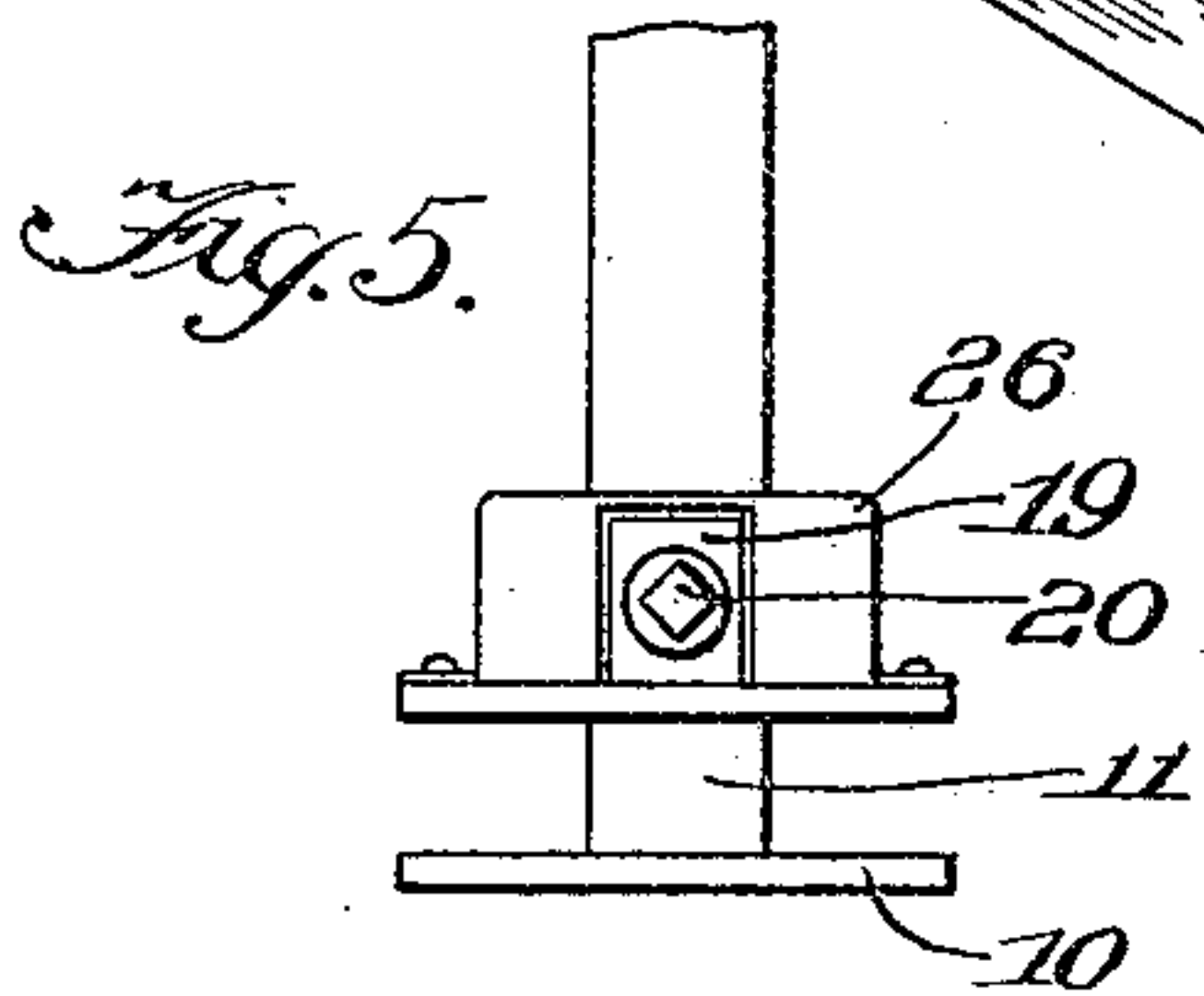
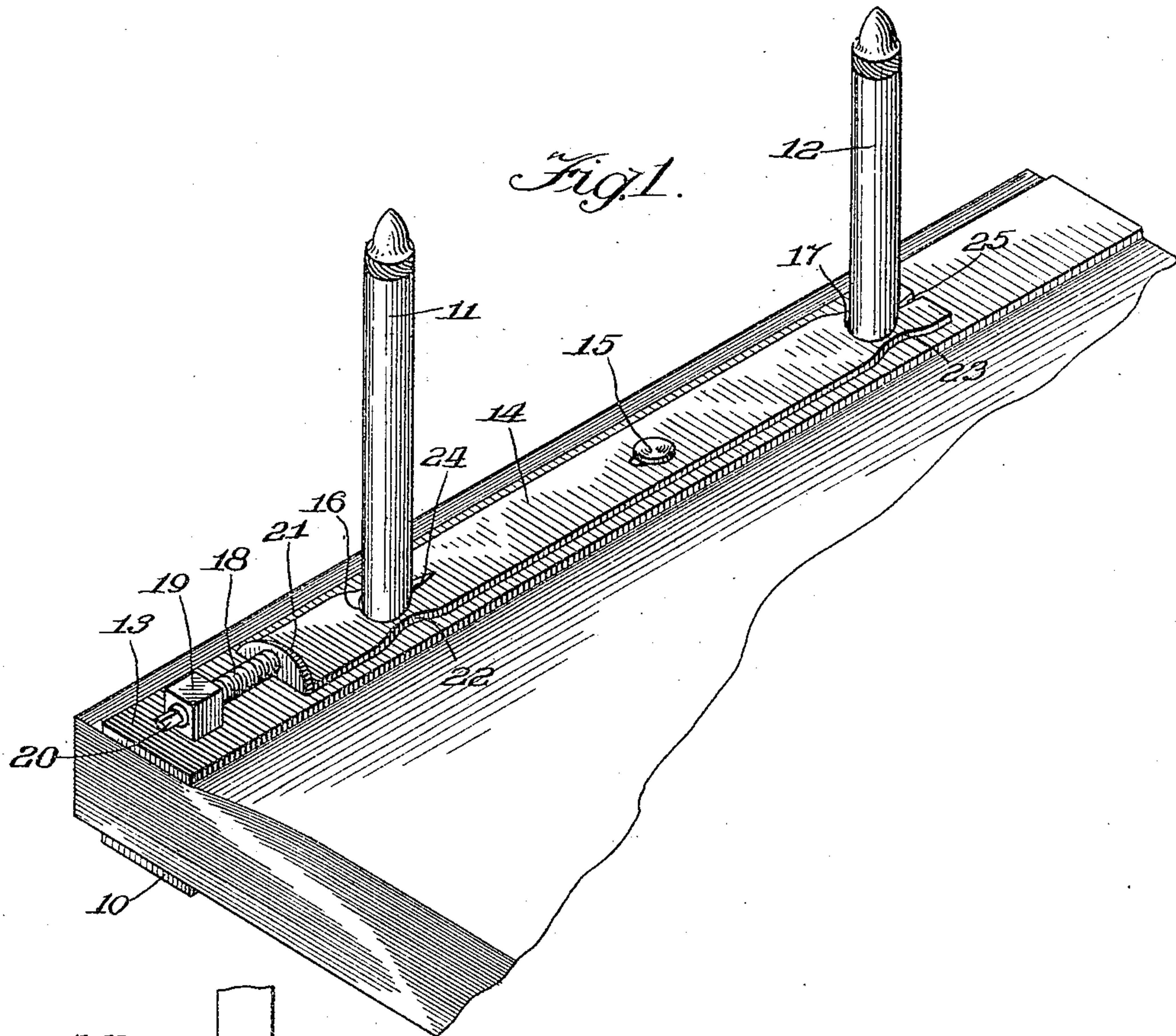


No. 808,058.

PATENTED DEC. 19, 1905.

C. R. NELSON.
FILE BINDER.

APPLICATION FILED MAR. 2, 1905.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES R. NELSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO SIEBER & TRUSSELL MANUFACTURING COMPANY, A CORPORATION OF MISSOURI.

FILE-BINDER.

No. 808,058.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Original application filed August 1, 1903, Serial No. 167,922. Divided and this application filed March 2, 1905. Serial No. 248,124.

To all whom it may concern:

Be it known that I, CHARLES R. NELSON, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in File-Binders, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to a binder for loose leaves of that type in which impaling-posts for receiving the sheets are secured to a base-plate and a compression and binding member is applied over the sheets and locked to the posts. The base-plate and compression member serve also to support covers for the completed file.

The object of the invention is to provide a locking mechanism for a device of this type which shall be effectively operative even though the impaling-posts may have become bent through severe handling of the file.

The invention consists in the construction and arrangement of parts to be hereinafter described and which are illustrated in the accompanying drawings, in which—

Figure 1 is a detail perspective view of the device in use with the cap-plate for covering the locking mechanism removed. Fig. 2 is a plan view of the device not in use. Fig. 3 is a plan view of the same with the cap-plate removed, as in Fig. 1. Fig. 4 is a detail longitudinal section on the line 4 4 of Fig. 2. Fig. 5 is a detail end view of the device not in use.

A base-plate, preferably taking the form of a metal strip substantially equal in length to the width of the sheets to be bound, is shown at 10 and carries a pair of upright impaling-posts 11 and 12. A plate 13, apertured to slide freely on the posts, is of the same form as the base-plate 10 and is applied above the sheets.

A locking-plate 14 rests on the strip 13 and is secured thereto by a headed stud 15, so as to be capable of longitudinal movement. This stud is firmly fixed in the strip 13, and its shank projects through a slotted aperture in the locking-plate. The plate is also apertured at 16 and 17 to receive the posts 11 and 12, these apertures being, however, larger than the diameter of the posts and their centers somewhat closer together than the distance between the center lines of the posts. The longitudinal movement of the plate is con-

trolled by a screw-bolt 18, having a swiveled engagement with the upturned forward end 21 of the plate and a threaded engagement with a block 19, rising from the strip 13. The head 20 of this screw-bolt is squared to receive a socketed key (not shown) by which it may be rotated.

The locking-plate 14 may be reduced in width adjacent the apertures 16 and 17, as indicated at 22 and 23, and is slotted for a short distance beyond each aperture, as at 24 and 25, this form being employed to provide yielding side walls for the apertures 16 and 17. The slot 25 preferably extends through to the end of the plate. The aperture 16 is so disposed relatively to the aperture 17 that when the locking-plate is advanced by rotating the screw-bolt 18 its sides do not come in contact with the post 11 until after the engagement of the side walls of the aperture 17 with the post 12. Since the side walls of this latter aperture yield more readily to pressure, owing to the fact that the slot 25 extends through to the end of the plate 14, and since the plate 14 may be advanced as far as may be desired by means of the screw-bolt 18, the walls of both apertures may be caused to grip firmly into the posts without requiring that an exact relation between them be provided in the construction of the binder or maintained during its life.

In using the device new sheets may be added to the file by loosening the screw-bolt 18 until the sides of the apertures 16 and 17 become disengaged from the posts 11 and 12, when the strip 13 may be easily removed and the additional sheets slipped over the posts. The strip 13 is then replaced above the last new sheet and is pressed down firmly by the hand and locked to the posts by turning up the screw-bolt 18.

In practice the binder may become very heavy when a large number of sheets have been filed, and the alinement of the posts 11 and 12 is apt to be disturbed by inadvertent misuse of the device. The invention provides a locking mechanism which, owing to its flexibility, will effectively secure the strip 13 in position though the posts 11 and 12 may have been considerably bent.

Usually flexible or hinged covers will be applied to the forward edges of the base-plate 10 and the binding-strip 13, and a finished appearance is given to the device by employ-

ing a cap-plate 26, which is apertured to accommodate the posts 11 and 12 and is secured to the strip 13 and arches over the locking mechanism.

5 I do not in this application broadly claim a binder of the type herein shown and described having the apertures of its locking-plate spaced differently from the spacing of the posts, as such claim is made in my co-
10 pending application, Serial No. 167,922, filed August 1, 1903, of which this application is a division.

I claim as my invention—

15 1. In a loose-leaf binder, in combination, a base-plate, a pair of posts set therein, a pressure-plate running on the posts, a binding-plate apertured to fit upon the posts and being in slidable engagement with the pressure-plate and resiliently expansible at each of its
20 apertures, and means for adjustably shifting the binding-plate.

25 2. In a loose-leaf binder, in combination, a base-plate, a pair of posts set therein, a pressure-plate running on the posts, a binding-plate apertured to fit upon the posts and being in slidable engagement with the pressure-plate and resiliently expansible at each of its apertures, the apertures in the binding-plate being of less width at one end than the diam-

eter of the posts, corresponding ends of the 30 apertures being contracted, and means for adjustably shifting the binding-plate.

3. In a loose-leaf binder, in combination, a base-plate, a pair of posts rising therefrom, an apertured pressure-plate running on the 35 posts, a binding-plate slidably engaging the pressure-plate and apertured to fit loosely on the posts and having a slit extending longitudinally from each aperture and being of less width than the diameter of the posts, 40 whereby it is rendered laterally expansible, a block secured to the pressure-plate and having a threaded aperture, and a screw engaging such aperture and in swiveled engagement with the binding-plate. 45

4. In a loose-leaf binder, in combination, a base-plate, a pair of posts set therein, a pressure-plate running on the posts, a binding-plate apertured to fit upon the posts and being in slidable engagement with the pressure- 50 plate and resiliently expansible at each of its apertures, and a screw-bolt for shifting the binding-plate.

CHARLES R. NELSON.

Witnesses:

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