

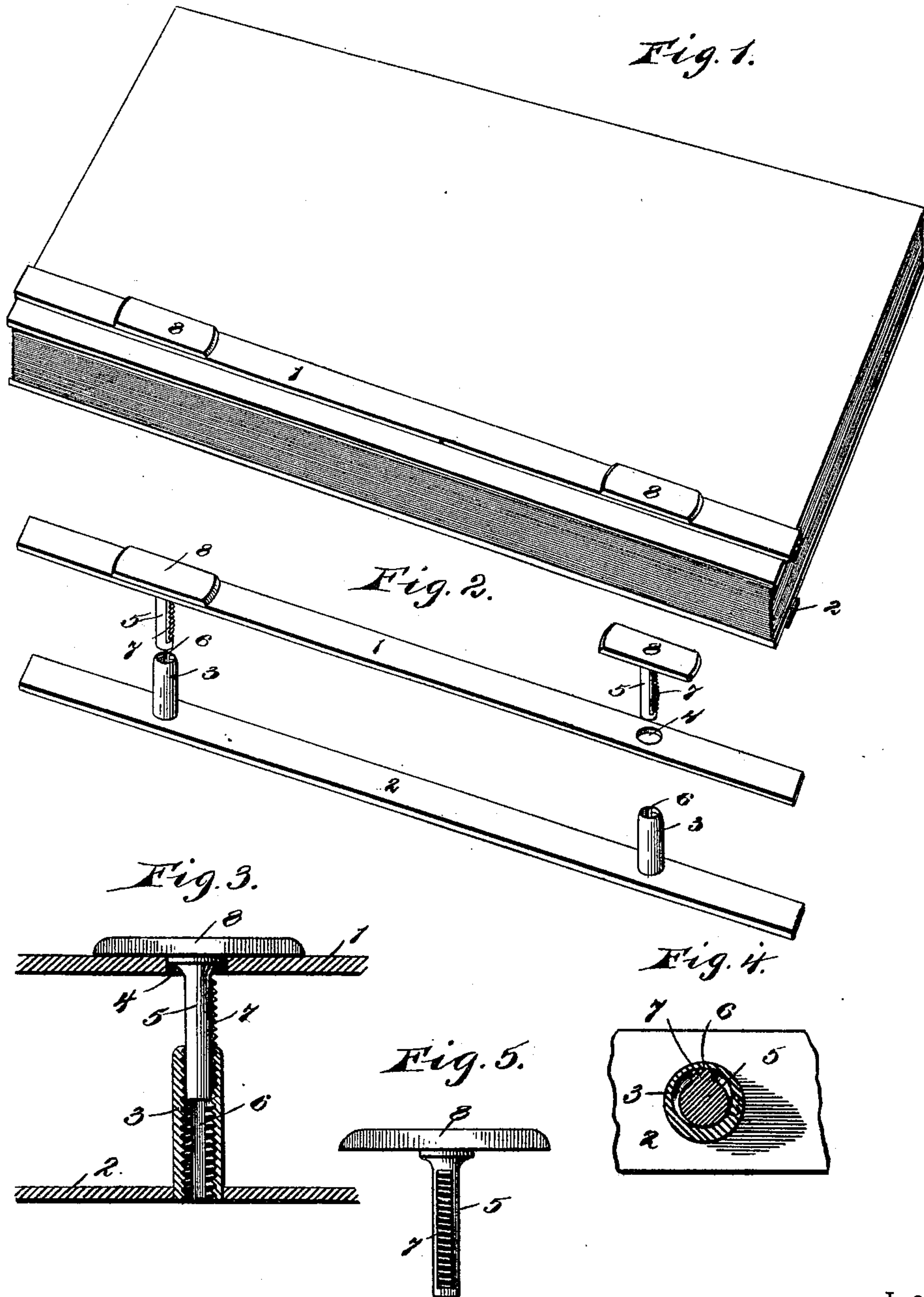
No. 635,409.

Patented Oct. 24, 1899.

N. VAN SICKLE.
TEMPORARY BINDER.

(Application filed May 20, 1897.)

(No Model.)



Inventor
Nial Van Sickle.

Witnesses

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UNITED STATES PATENT OFFICE.

NIAL VAN SICKLE, OF SIOUX CITY, IOWA.

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 635,409, dated October 24, 1899.

Application filed May 20, 1897. Serial No. 637,434. (No model.)

To all whom it may concern:

Be it known that I, NIAL VAN SICKLE, a citizen of the United States, residing at Sioux City, in the county of Woodbury and State of Iowa, have invented a new and useful Temporary Binder, of which the following is a specification.

My invention relates to bookbinding, and particularly to temporary binders adapted for use in connection with loose-leaved ledgers and account-books, order-books, samples of stock, and the equivalent thereof; and the object in view is to provide a simple, inexpensive, efficient, and readily-manipulated device adapted for arrangement to secure together loose leaves at one edge, whereby the opposite edge is left free, thus enabling the several samples or leaves to be inspected without disarranging the binding, and, furthermore, to provide a binder which is capable of adjustment, whereby samples or leaves may be removed or added and the device adapted to suit the diminished or increased thickness.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a temporary binder constructed in accordance with my invention applied in the operative position to a bundle of leaves or samples so arranged as to form a note-book or order-book. Fig. 2 is a detail view in perspective of the binder detached. Fig. 3 is an enlarged vertical section taken in the plane of one of the locks. Fig. 4 is a detail transverse section of the same enlarged, showing in full lines the position of the pin as when inserted into the socket and in dotted lines the position thereof when turned through an arc of ninety degrees to cause engagement of its rack with the threads of the socket. Fig. 5 is a detail view, detached, of the pin.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The binder comprises, essentially, front and rear strips 1 and 2, adapted to be arranged in contact with the opposite surfaces of a bundle or collection of sheets, leaves, samples, or

similar separate articles to be bound, the rear strip being provided with socket-tubes 3, which extend forwardly through registering perforations previously formed in the articles and the front strip being provided with openings 4 to register therewith, and locking devices, consisting of headed pins 5, extending rearwardly through said openings in the front strips and engaging the socket-tubes to secure the strips in the desired relative position.

The socket-tubes are attached rigidly to the rear strip and are interiorly threaded or serrated except at one point, where the threads or serrations are cut away by the formation of a groove 6 to produce a smooth or plane surface. The locking-pins are also threaded or serrated, as shown at 7, to form a rack, of which the teeth have a pitch corresponding with the pitch of the threads in the socket-tubes. The width of each rack is equal to the plane surface of the socket-tube in which it is fitted, whereby the introduction of the pin to the desired depth to bring its flat bearing-head 8 in contact with the exterior surface of the front strip may be accomplished by one movement and without turning the pin. In order to lock the parts in this position, the head is turned to bring it in the plane of the strips, as shown in Fig. 1. This turning of the pin causes the engagement of its teeth with those of the socket-tube, and hence secures the parts against displacement, and the pitching of the threads enables the locking devices, after the initial approximate adjustment of its members, to draw the strips together by screw action, and thus firmly compress the parts or articles comprising the book or bundle. The threaded portion of each socket-tube cross-sectionally preferably covers a distance of approximately three-fourths the circumference of the tube, while, obviously, the rack or toothed portion of the pin is proportionately of smaller extent, as not exceeding one-fourth of the circumference of the pin, whereby the rotary adjustment of the pin to cause compression of the articles utilizes the pitch of the interlocking threads through an arc of two hundred and seventy degrees or more.

Various changes in the form, proportion, and the minor details of construction may be

resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

5 A temporary binder comprising opposite strips, socket-tubes carried by one of the strips, openings in the other strip with which said tubes are adapted for alinement, said
10 tubes having corrugated inner surfaces with the corrugated portions non-continuous around the same, and locking-pins adapted to be passed through the openings in one strip and into the tubes of the other strip and hav-
15 ing corrugations upon their outer surfaces adapted for engagement and disengagement with the corrugations of the tubes as the pins are rotated, said corrugated surfaces being non-continuous around the pins, and a head
20 carried by each pin and adapted to lie upon

the strip having the openings, and flush with the sides thereof, when the corrugations of the pins are engaged with the corrugations of the tubes, and said heads being adapted to lie transversely of the strip having the open- 25 ings, and project beyond the side edges thereof when the corrugated portions are disengaged, whereby when the corrugations are engaged, accidental displacement of the pins may be prevented, and when the corrugated 30 portions are disengaged, the fingers may be inserted beneath the heads to withdraw the pins.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 35 the presence of two witnesses.

NIAL VAN SICKLE.

Witnesses:

HUGO N. HINSCH,
G. W. LASHELLE.