July 3, 1934. J. N. MAINWARING 1,965,554

BINDER CLIP

Filed Dec. 26, 1933

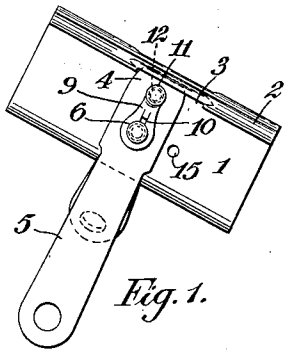

Fig. 1.

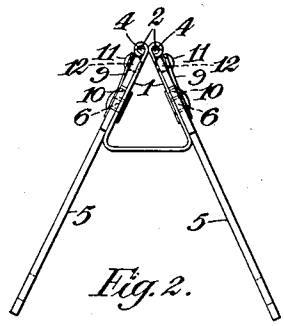

Fig. 2.

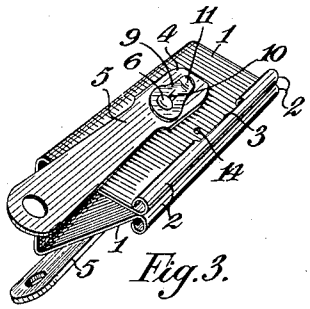

Fig. 3.

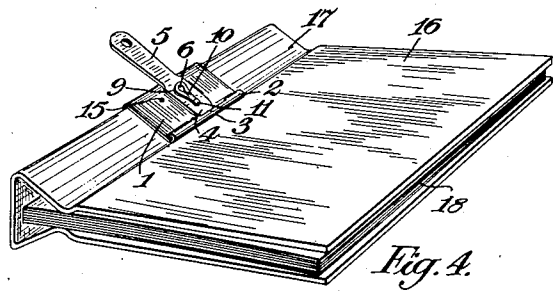

Fig. 4.

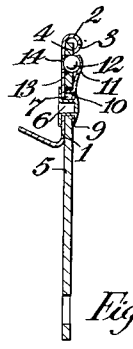

Fig. 5.

Fig. 6.

Fig. 7.

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UNITED STATES PATENT OFFICE

1,965,554

BINDER CLIP

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Application December 26, 1933, Serial No. 703,993

2 Claims. (Cl. 24—259)

This invention relates to binder clips of the kind including a gripping member formed of spring steel and constituting in effect a split tube provided with substantially flat portions on either side of the split, forming jaws between which papers or the like may be engaged and having pivotally connected with such flat portions levers adapted to be moved about an axis perpendicular to the general surface of such walls into the position in which pressure upon the ends of the levers opens the clip by forcing the jaws apart or into a second and inoperative position in which the levers extend in a direction parallel with the axis of the tube.

According to the invention each of the pair of levers is provided with a spring catch adapted to engage holes or recesses in the side wall of the gripping member and thus operate to retain the levers in one position in which they will facilitate the opening of the clip or in a second, normal or inoperative position.

Thus, in accordance with the invention with each of the levers there is associated a spring element co-operating with a ball catch adapted to be forced by the spring into the holes or recesses in the side walls of the gripping member.

For example each of the levers is provided with a hole in which is located a steel ball with which is arranged to co-operate a spring element furnished with a pocket engaging the steel ball and secured in fixed relation with the lever by means of the pivot pin securing the same to the jaw of the clip member in such manner as to operate to constrain the ball when the lever is in the appropriate position into engagement with one or other of the holes or recesses in the side walls of the gripping member and thus to retain the lever in the desired position.

The invention will be described in detail with reference to the accompanying drawing illustrating by way of example one construction in accordance with the invention:—

Figure 1 is a view in side elevation of a clip in accordance with the invention with the levers in the extended position;

Figure 2 is a corresponding view in end elevation with the levers in the like position;

Figure 3 is a perspective view of the clip with the levers in the operative position;

Figure 4 illustrates the application of the device to a binder;

Figure 5 is a fragmentary view in sectional elevation of one of the levers and the associated portion of the clip;

Figure 6 is a detail view of one of the levers, and

Figure 7 is a view of a detail, namely the spring catch one of which is associated with each of the levers.

In the drawing, 1 indicates the gripping member of the clip formed of spring steel, and constituting in effect a split tube having substantially flat sides provided with curved lips 2 recessed at 3 to enable the forward ends 4 of the levers 5 to be engaged when in their extended position in which they facilitate the opening of the clip in order to engage between the same sheets of paper, documents or a binder.

Each of the levers is pivotally secured to the yoke by a rivet 6 passing through a keyhole slot 7 in the lever and through a hole 8 provided in the member 9 furnished with a downwardly directed lug 10 adapted to engage in the keyhole slot and with a recess or pocket 11 in which is engaged a steel ball 12 which is forced by the resilience of the member 9 to project through a hole 13 in the lever and into a hole 14 in the yoke piece when the levers are in the extended position or into the hole 15 when the levers are in their normal position, thus operating to lock the levers in either of the positions above indicated in accordance with requirements.

Referring to Figure 4, 16 indicates the side portions of a binder, the back of which is indicated by the reference 17, 18 indicating sheets of paper or documents protected by the covers of the binder and secured in position between the covers by means of the clip.

Having now described my invention what I claim as new and desire to secure by Letters Patent is:—

1. A binder clip comprising a spring steel gripping member constituting in effect a split tube provided with substantially flat side walls on either side of the split forming jaws between which papers and the like may be engaged, levers connected with such flat portions adapted to be moved about an axis perpendicular to the general surface of such walls into the position in which pressure upon the ends of the levers opens the clip by forcing the jaws apart or into a second and inoperative position in which the levers extend in a direction parallel with the axis of the tube and associated with each of the levers, a spring element co-operating with a ball catch adapted to be forced by the spring into recesses in the side walls of the gripping member to retain as desired the levers in the one position in

which they will facilitate the opening of the clip or in the second inoperative position.

2. A binder clip comprising a spring steel gripping member constituting in effect a split tube provided with substantially flat side walls on either side of the split forming jaws between which papers and the like may be engaged, levers connected with such flat portions adapted to be moved about an axis perpendicular to the general surface of such walls into the position in which pressure upon the ends of the levers opens the clip by forcing the jaws apart or into a second and inoperative position in which the levers extend in a direction parallel with the axis of the tube, a steel ball located in a hole in each of the levers, a spring element engaging the steel ball and operating to constrain the same into a position in which it is pressed against the side walls and a pivot pin securing the spring element in fixed relation with the lever and also securing the lever to the side wall of the spring element in which are provided recesses adapted to be engaged by the spring-pressed ball.

JOHN NELSON MAINWARING.