C. V. HENKEL. TEMPORARY BINDER.

(Application filed Sept. 22, 1900.)

(No Model.) Fig. 1 C WITNESSES: INVENTOR ShuaBergetron IB Clavers.

United States Patent Office.

CHARLES V. HENKEL, OF NEW YORK, N. Y.

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 665,740, dated January 8, 1901.

Application filed September 22, 1900. Serial No. 30,752. (No model.)

To all whom it may concern:

Be it known that I, CHARLES V. HENKEL, of the city of New York, borough of Manhattan, in the county and State of New York; 5 have invented a new and Improved Temporary Binder, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide a temporary binder which may readily be adro justed to suit the amount of papers therein, thus rendering the capacity of the binder variable according to the number of papers it

is desired to bind or file.

This specification is the disclosure of one 15 form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indi-20 cate corresponding parts in all the figures.

Figure 1 is a rear elevation of the binder, the covers being thrown open. Fig. 2 is a sectional view taken through one of the sectional posts. Fig. 3 is a detail perspective 25 view of one of the sections of the posts. Fig. 4 is a similar view of one of the end sections which are permanently fastened to the back of the binder. Fig. 5 is a cross-section taken on the line 5 5 of Fig. 2. Fig. 6 is a 30 similar view taken on the line 6 6 of Fig. 2. Fig. 7 is a sectional view showing a slightlymodified form of the invention. Fig. 8 is a sectional view taken on the line 8 8 of Fig. 7, and Fig. 9 is a fragmentary plan view of the 35 auxiliary back-section which is used in the modifications illustrated in Figs. 7 and 8. Referring to Figs. 1 to 6, a represents the

back-sections of the binder, and b the covers, which are carried, respectively, on the backs 40 by a flexible connection of the usual sort. The backs a are rigidly connected with each other by the sectional filing-posts, which are each of which comprises a stationary end sec-45 tion c and a stationary end section d, said end sections being permanently attached, respectively, to the backs a. Each filing-post also comprises one or more intermediate sections e.

The end section c is tubular in form and is open at its inner end. This end portion is formed with indentations c', which are dia- l of the section d. When, therefore, the screw

metrically opposite each other and which form slight projections on the inner surface of the section. The intermediate section e is formed 55 with a tubular portion e' and a reduced portion e^2 at one end. This reduced portion e^2 is formed with oppositely-disposed longitudinal grooves e³ therein. (See Figs. 3 and 6.) The part e^2 of the section e is adapted to be 60 inserted into the section c, so that the projections formed by the indentations c' will slide in the grooves e^3 . The reduced portion e² is further provided with short transverse grooves e^4 , which are four in number, corre- 65 sponding to the indentations c' and which are arranged in pairs respectively leading to the grooves e^3 . Therefore when the part e^2 is inserted in the section c it is first moved axially until the inner end of the part e' of the 70 intermediate section strikes against the inner end of the section c, whereupon the transverse groove e^4 will register with the indentations c', and then by turning the intermediate section e the projections formed by the in-75 dentations c' will be engaged with the walls of the grooves e^4 , thus locking the two sections c and e together. If desired, the grooves e4 may be formed with a slight spiral disposition with respect to the axis of the section e, 80 so that when the section e is turned it will be locked in place much in the nature of a screw.

The part e' of the intermediate section e is formed exactly the same as the inner part of 85 the end section c, so that it may be connected with the part e^2 of a second intermediate section, if desired, and so the several sections may be built up, one on the other, to increase the length of the filing-posts. Each filing- 90 post therefore comprises two stationary end sections and as many intermediate sections as are desired.

The end section d is adapted to be locked preferably two in number (see Fig. 1) and | in the part e' of the intermediate section e, 95 which occurs immediately adjacent thereto, and this end section d is tubular in form and has its inner part split, as indicated at d'. The inner end of the end section d is formed with tapered portions d^2 , as is shown best in 100 Fig. 2, and working within the section d is a screw f, the inner end f' of which is formed conical to work with the tapered portions d^2

f is moved inward to the position indicated in Fig. 2, the end f' of the screw will bear against the tapered portions d^2 of the section d and will spread the split inner end of the section 5 d, thus binding it against the inner surface of the adjacent section e and locking said section with the section d. The indentations of the part e' of the section e, which are similar to the indentations c' of the section c, engage ro in the slits d' of the section d, the same as the indentations c' engage in the grooves e^3 of the part e^2 of the intermediate section e. The screw f is inserted into the section d from the outside of the adjacent back-section α of 15 the binder, and any suitable wrench may be provided for the operation of the screw, also for the purpose of manipulating the intermediate sections e. The parts e' of these sections may be formed with recesses or kerfs 20 e^5 to facilitate the engagement of an instrument by which to turn the intermediate sections in and out of their locked positions.

In Figs. 1 to 6 the screw f has its end portion visible outside of the back-section a, to 25 which it is attached. In Figs. 7, 8, and 9 I have shown a modified construction which enables me to hide this screw and to give the binder an unbroken and finished appearance, the same as that of a well-bound book. This 30 is effected by means of an auxiliary back-section a', to which the end section d of the filingpost is attached, the same as shown in Fig. 2. This auxiliary back-section a' works with a back-section a, which is similar to the back-35 sections in Figs. 1 and 2. The other backsection a, which is adjacent to the auxiliary back-section a', is connected with the firstnamed back-section by a binder g, of leather or other flexible material, in which is em-40 bodied a spring h. The back a, which is adjacent to the auxiliary back a', is provided with two catches i, adapted to engage in slots a^3 , formed in the ends of the auxiliary back a', so as to hold the auxiliary backs snugly 45 against the adjacent back-section a, and thus cause these two parts to operate as one, as illustrated in Fig. 8. The catches i are mounted to turn in the back, and by turning the catches one way or another they may be engaged with

Fig. 7 shows the catches i disengaged from the auxiliary back a'. In using this form of the device to adjust the filing-posts it is necessary to release the catches i and throw

50 or disengaged from the auxiliary back.

open the back of the book, so that access 55 may be had to the screws f. The spring h adjusts itself to the movement of the back-sections a and always gives the back of the book a symmetrical appearance.

Having thus described my invention, I 60 claim as new and desire to secure by Letters

Patent—

1. A temporary binder having a filing-post made up of stationary end sections and removable intermediate section or sections, the 65 intermediate sections comprising each a tubular part and a reduced part at the other end, the tubular parts having projections formed on their inner faces and the reduced parts having grooves therein, for the purpose specinos fied.

2. The intermediate section of a sectional filing-post in temporary binders, comprising a tubular part at one end and a reduced part at the other end, the tubular part having one 75 or more projections on its inner face, and the reduced part having slots disposed longitudinally and transversely for the purpose specified.

3. A temporary binder having two back-sections, a spring connection between the back-sections, such connection forming the back of the binder, an auxiliary back-section, a sectional filing-post extended between the auxiliary back-sections and one of the first-st named sections, and a catch for removably connecting the auxiliary back-section with the other of the first-named back-sections.

4. A temporary binder having back-sections, an auxiliary back-section, a removable 90 filing-post extending between the auxiliary back-section and one of the first-named back-sections, and a releasable catch for connecting the auxiliary back-section with the other first-named back-section.

5. A temporary binder, having two backsections, an auxiliary back-section, an adjustable filing-pin connecting the one backsection with the auxiliary back-section, and means for removably connecting the second 100 back-section with the auxiliary back-section.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES V. HENKEL.

Witnesses:

I. B. OWENS, EVERARD BOLTON MARSHALL.