

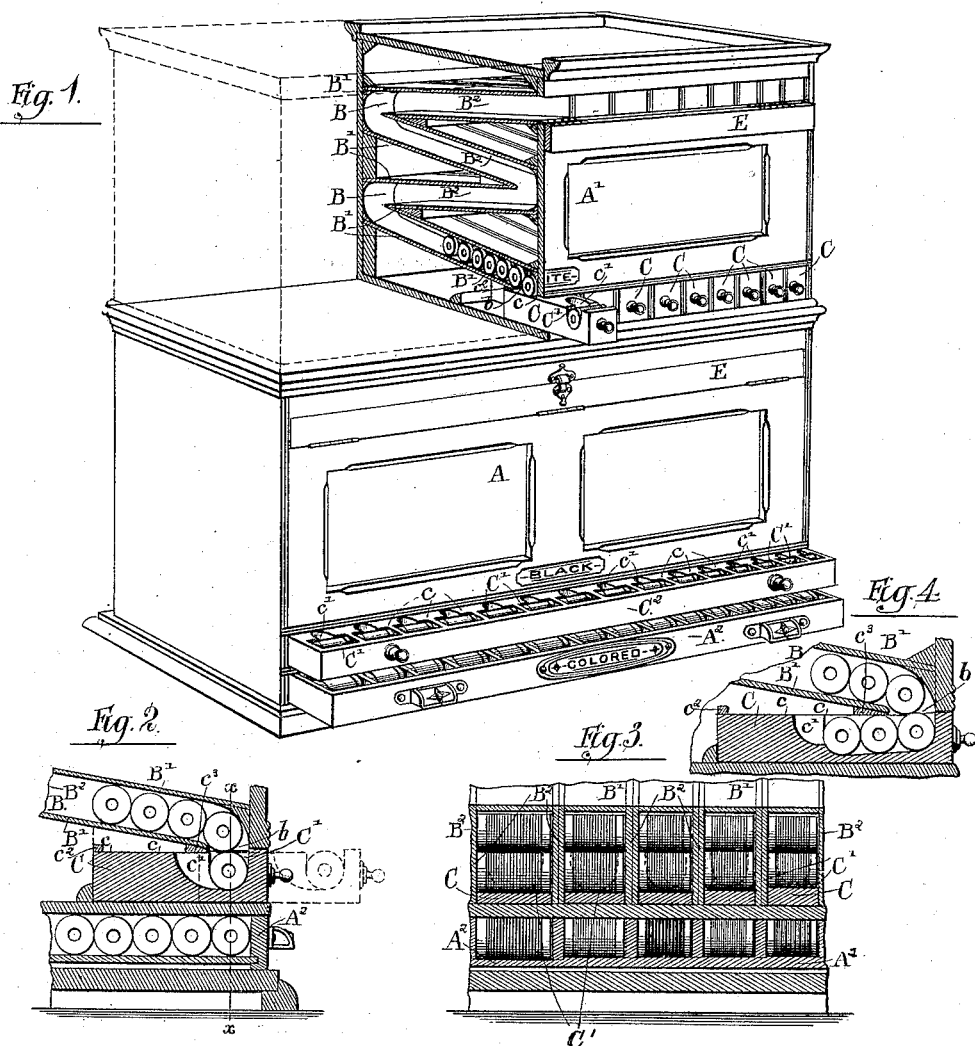
(No Model.)

W. F. STREICH.

THREAD CABINET.

No. 344,792.

Patented June 29, 1886.



Witnesses:
Louis M. Whitehead
C. C. Poole

Inventor:
William Frederick Streich
by:
W. E. Dwyer
Attorney:

UNITED STATES PATENT OFFICE.

WILLIAM F. STREICH, OF CHICAGO, ILLINOIS.

THREAD-CABINET.

SPECIFICATION forming part of Letters Patent No. 344,792, dated June 29, 1886.

Application filed July 6, 1885. Serial No. 170,674. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. STREICH, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Thread-Cabinets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved case or cabinet for holding spool-thread; and it consists in the matters hereinafter described, and pointed out in the appended claims.

The device herein shown as embodying my invention comprises a case containing a series of inclined spool-passages constructed to receive the spools at their upper ends, and provided with means at their lower ends whereby one or more spools may be readily removed without allowing the escape of other spools contained in the passages, as will hereinafter fully appear.

The invention may be more fully understood by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of two similar cases, the upper one of which is shown in section to illustrate the interior construction thereof. Fig. 2 is a central vertical section taken longitudinally through the lower end of a spool-passage and discharging devices therefor, together with a drawer similar to that shown at the bottom of the lower case in Fig. 1. Fig. 3 is a section taken transversely through the lower ends of the passages upon line *xx* of Fig. 2. Fig. 4 is a sectional view illustrating a slide or drawer provided with a recess adapted to receive several spools.

As illustrated in the perspective view, Fig. 1, two cases or cabinets, A and A', are shown, both containing a series of tubular inclined receptacles or passages adapted to receive thread of different sizes or numbers, and one of which may be used for white and the other for black thread. The cases shown are similar to those which will be ordinarily employed in stores, and the lower one is shown as conveniently provided at its bottom with a drawer, A², for colored thread, the drawer being divided by suitable partitions into compart-

ments adapted to contain a number of spools of different colors, but of the same size.

B B are the spool receptacles or passages, herein shown as extending backwardly and forwardly between the front and rear vertical walls of the cabinet, in order to obtain sufficient length therein, and inclined sufficiently to cause a line of spools to move freely through them, the said passages being connected at their upper ends with suitable openings in the walls of the cabinet, through which the spools may be introduced, and provided with exit-openings at their lower ends, closed by suitable devices to prevent the escape of the spools, except as wanted.

In the cabinet shown the passages B are formed by means of upper and lower parallel walls or partitions, B', of thin wood or metal, which are secured to the front and rear walls of the cabinet in any suitable manner, the spaces between the said walls or partitions B' being divided by vertical partitions B², so as to form passages of suitable size for the spools. The said passages may all be made of the same width; but as herein shown they vary in width to correspond with the lengths of the spools, this construction being desirably used in order to lessen the size or bulk of the cabinet.

In connection with a cabinet or thread-case containing an inclined passage or passages such as is above described, means for removing the lowermost spool of the line of spools in each passage without allowing the escape of all of the spools in the passage are herein provided, as follows: As shown in the upper part of Fig. 1, and in Figs. 2 and 3, slides or drawers C C, one for each passage, are located at the lower ends of said passages, said drawers being arranged to extend beneath the forward portions of the lower walls, B', of the passages, and provided with recesses or notches C' in their forward or outer ends, arranged to come beneath openings *b* in the said lower walls of the passages at the lower ends of the latter when the drawers are closed. Said openings *b* are made of the proper size to allow the passage of a single spool, and the recesses C' in the drawers are made equal in depth to the diameter of a spool, so that when the end spool of the line of spools enters the said recess through the opening the next spool

will be supported upon a level or nearly upon a level with the upper edge or surface of the drawer or slide, as clearly shown in Fig. 2.

The top surface, *c*, of the drawer C at the rear of the recess C' is made horizontal, and is adapted to support and hold from forward movement the second spool of the series when the first or end spool has been removed from beneath said second spool by pulling the drawer outwardly, as clearly shown in Fig. 1. When the drawer is pulled out into the position shown in Fig. 1, the spool contained in the recess thereof is removed, and upon the return of the drawer to its usual position the spool resting against the surface *c* thereof will drop into the recess, and may be removed in a similar manner when desired.

The drawer C may be provided with a recess, *c'*, at the rear of the spool, into which the finger may be introduced to more conveniently remove the spools from the drawers. The portions of the drawer at either side of the said recess *c'* are of course continued forward to the recess C', so as to engage the end portions of the spool above it and properly sustain the latter when the drawer is pulled out.

In the particular form of the drawers C shown, the latter are made of blocks of wood, and the recesses C' are cut through from side to side thereof, so that the spools may be grasped at their ends and removed without the use of the recesses *c'*. The same result may, however, be obtained by the use of drawers or slides constructed of metal or otherwise, provided said drawers contain recesses to receive the end spools, and a surface to sustain the remaining spools while the drawer is pulled out for the removal of the spool within it.

In a cabinet intended to contain a series of spools of different sizes, and in which the drawers C are of the same vertical depth, as shown, the recesses C' will be made shallower for the smaller spools than for the larger ones, as clearly shown in Fig. 3, so as to bring the tops of the spools within the several recesses level with the top surfaces of the drawers. The drawer C and cabinet are desirably provided with stops *c²* and *c³*, Figs. 2 and 9, to limit the outward movement of said drawers.

Instead of using a series of drawers, C, a single slide or drawer extending beneath and adapted to receive spools from a number of spool-passages may be employed. This construction is illustrated in connection with the lower case, shown in Fig. 1, in which a single drawer or slide, C², is shown as extending along the entire front of the cabinet, the said drawer C² being provided with recesses C' to receive the spools, and a rear horizontal surface, *c*, to prevent the escape of the spools when the slide is drawn out, in the same manner as described in connection with the drawers C. The spool-holding recesses C' being in this case closed at their ends, the recesses *c'* are obviously desirable to enable the spools to be readily removed.

The use of the single slide C² may be found advantageous as affording a more simple construction in the parts and enabling the several sizes of spools to be inspected at once when the drawer is opened. The spools in the passages will obviously be prevented from moving downwardly by the presence of the spools in the recesses when the drawer is moved in and out, except in the case of a recess from which a spool has been removed, when the next spool will be fed down in readiness to be removed when the drawer is again opened in the same manner as before set forth.

It will obviously often be desirable to remove more than one spool at one time from one of the passages of the cabinet, and in order to avoid the necessity of moving the drawer several times under such circumstances the recess C' may be made sufficiently wide to receive several spools at once. This construction may obviously be applied either to the drawers C shown in Figs. 2 and 3 or to the single drawer C² at the lower part of Fig. 1. In either case the sectional view of the drawer will be substantially as shown in Fig. 4, in which the recess C' is shown as made of a width to receive three spools side by side. The opening *b* in the passage B above the slide will in this case be of proper size to permit the discharge of one spool at a time, and the three spools to fill the recess C' will obviously drop into place into the said recess as the drawer is thrust back after being emptied in the same manner as in the case of recess adapted to contain a single spool. When the recess C' is made of sufficient width to receive several spools, as shown in the said Fig. 4, the bottom of said recess will preferably be inclined in a direction downward away from the opening *b*, by which the spools enter the recess, this construction being used to facilitate the movement of a spool beneath said opening away from the latter, to permit the downward movement of other spools in the passage.

The passages B, at their upper ends, may be arranged in any suitable way for the convenient insertion of the spools therein. As herein illustrated, said passages terminate at the upper margin of the front wall of the cabinet, and are closed by a flap-door, E, forming a part of the ornamental front of the cabinet.

I claim as my invention—

1. A thread-cabinet provided with vertical front and rear walls, and with a number of parallel inclined spool-passages arranged side by side, each extending back and forth in vertical planes to and between the said vertical front and rear walls of the cabinet from the top to the bottom of the latter, and with a slide or drawer receiving the spools from said passages, substantially as described.

2. The combination, with the thread-cabinet provided with one or more inclined spool-passages terminating near the front wall of the cabinet, of a slide or drawer, as C, provided with a recess in its forward or outer part to receive a spool or spools from one or

more of said passages, and formed with a rear top surface constructed to arrest the downward movement of the spools within the passage or passages when the slide is drawn out, substantially as described.

5 3. The combination, with a spool-passage, of a slide or drawer provided with a recess, C', to receive a spool, and having a horizontal part or surface constructed to arrest the downward movement of the spools when the slide is drawn out, and a recess, c', adjacent to the recess C', substantially as described.

10 4. The combination, with a thread-cabinet provided with a series of spool-passages of 15 different widths, of a single slide or drawer

having in its forward part a series of recesses, C', made of different widths and depths to receive spools of different sizes from the several passages, and formed with a horizontal part or surface, c, at the rear of the said recess C', 20 to arrest the downward movement of the spool within the several passages when the slide is drawn out, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence 25 of two witnesses.

WILLIAM F. STREICH.

Witnesses:

C. CLARENCE POOLE,

S. ARTHUR WALTHER.