No. 616,763. Patented Dec. 27, 1898.

M. BELVILLE & W. OLTMER.

WORK BOX.

(No Model.) (Application filed May 12, 1898.)

2 Sheets—Sheet 1.

Fig. 1.

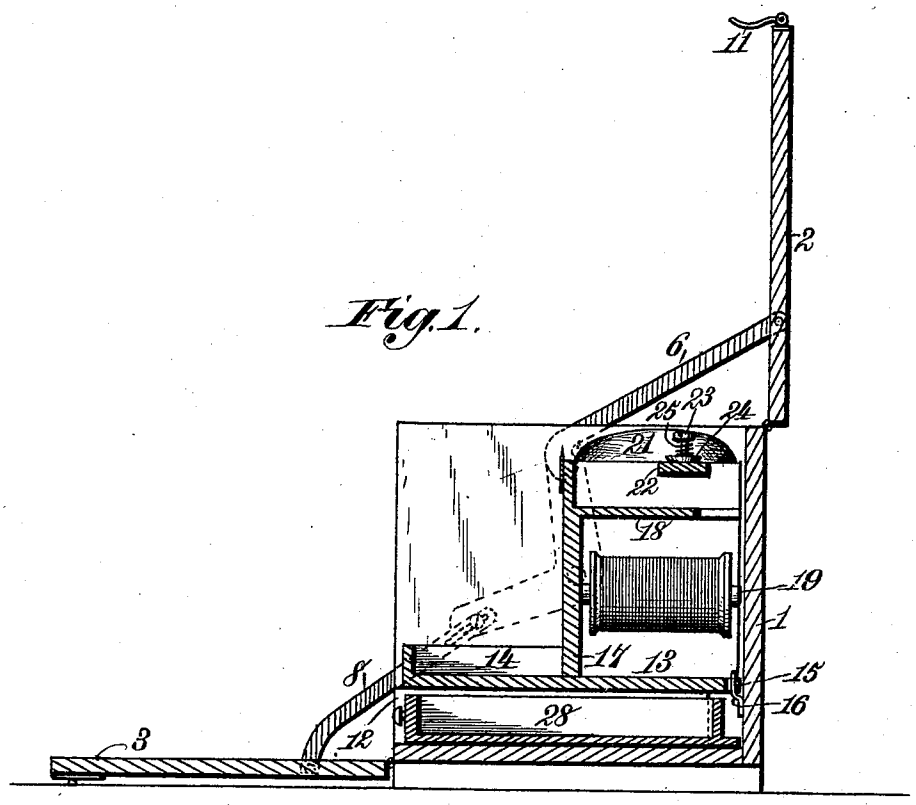
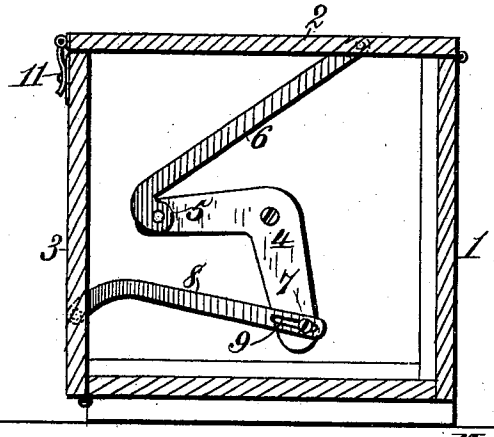


Fig. 2.



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Fig 3.

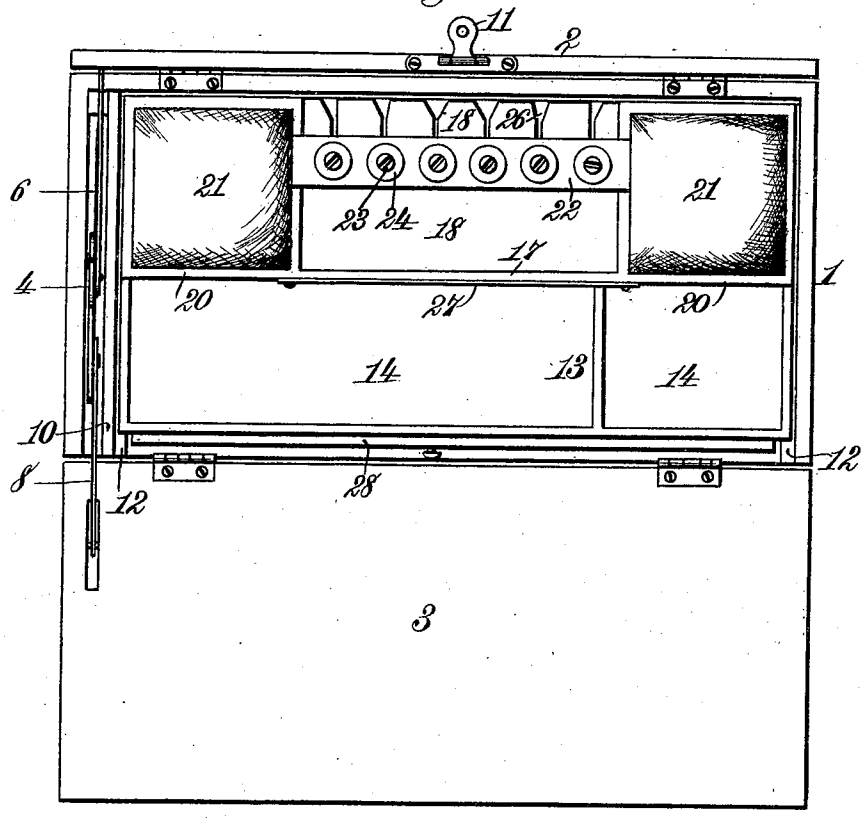
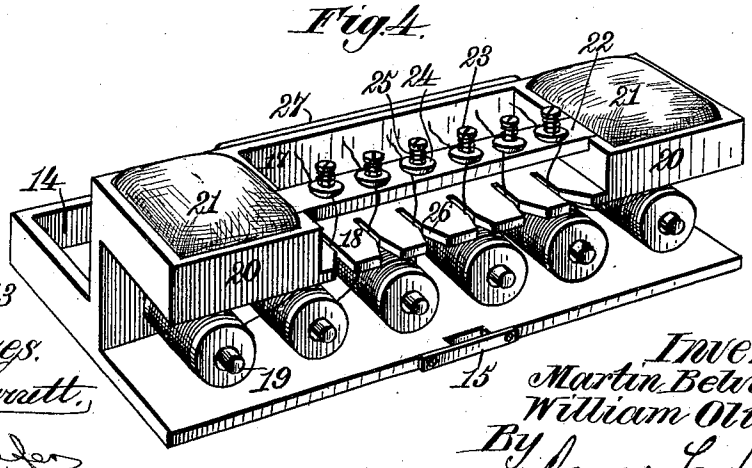


Fig 4.



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UNITED STATES PATENT OFFICE.

MARTIN BELVILLE AND WILLIAM OLTMER, OF SALMON CITY, IDAHO.

WORK-BOX.

SPECIFICATION forming part of Letters Patent No. 616,763, dated December 27, 1898.

Application filed May 12, 1898. Serial No. 680,472. (No model.)

To all whom it may concern:

Be it known that we, MARTIN BELVILLE and WILLIAM OLTMER, citizens of the United States, residing at Salmon City, in the county of Lemhi and State of Idaho, have invented new and useful Improvements in Cabinet Spool and Work Holders, of which the following is a specification.

This invention relates to a cabinet spool and work holder, and has for its object to provide a cabinet of the type described, having a hinged top and front, with improved and simple mechanism which operates when the top is raised and lowered to lower and raise the front in such manner that said parts will be held open until the top is again closed by hand.

It has for a further object to provide an improved tray for holding a plurality of spools in such manner that the thread or silk is always easily accessible and may be readily reeled off from the spools and to combine with such a holder tension devices for producing a yielding tension on the thread, a cutter for severing the thread, and guides for leading the thread from the spools to the tension devices, said tray being provided with convenient receptacles for the reception of sewing materials and accessories.

To these ends our invention consists in the features and in the construction, arrangement, and combination of parts hereinafter described, and particularly pointed out in the claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a transverse vertical sectional view of our improved cabinet spool and work holder, the top and front being shown open. Fig. 2 is a similar view taken through one end of the cabinet, the top and front being shown closed. Fig. 3 is a plan view showing the top raised and the front lowered, and Fig. 4 is a detail perspective view of the spool-holder removed from the cabinet.

Referring to the drawings, the numeral 1 indicates the cabinet or case, consisting of a rectangular box having a hinged lid or cover 2 and a folding front 3, which is hinged at its lower edge to the lower front edge of the bottom of the box, whereby access may be had to the interior of the box both from the front and top. In order that the top and front may be opened and closed simultaneously and by the same operation, we provide the following mechanism: Pivoted to the inner side of one end of the cabinet is a bell-crank lever 4, to the end of one arm 5 of which is pivotally attached one end of a link 6, the other end of said link being pivotally attached to the top 2 at a point intermediate the front and rear edges of the latter. To the end of the other arm 7 of the bell-crank lever is pivotally attached one end of a link 8, the other end of which is in like manner attached to the front 3 at a point between its upper and lower edges.

Let it be assumed that the cabinet is closed, as shown by full lines in Fig. 2. Then if the top 2 be raised it will be evident that the link 6 will raise the arm 5 of the bell-crank lever and will thus also throw forward and raise the arm 7, which in turn will thrust forward the link 8, thus lowering the front 3. We have shown the inner end of the link 8 slotted, as at 9, where it is pivoted to the arm 7 of the bell-crank lever, and this is for the purpose of permitting lost motion between the bell-crank lever and the link 8—that is to say, when the front has been lowered to a horizontal position the slot will permit the pivot on the end of the arm 7 to move idly therein while the top has been swung back further to a point slightly past the vertical. When the top is lowered, the reverse movement of the parts will take place and the front be raised or closed in a manner which will be readily understood. A partition 10 is fixed in the end of the box adjacent to the mechanism above described and serves to cover and protect the same. A fastening 11 is provided for attaching the top and front together when closed and prevent any tendency of the front raising the top.

Attached to the lower inner edges of one end of the cabinet and the partition 10 are cleats 12, on which is adapted to removably rest a tray 13, provided with a plurality of compartments 14 for the reception of sewing implements and accessories, and to the rear edge of the tray 13 is secured a hasp 15, that is adapted to engage or fit over a hook 16, fastened to the back of the cabinet and prevent the accidental displacement of the tray.

To the tray 13, intermediate its front and rear edges, is attached a longitudinal vertical partition 17, to the upper edge of which is attached a shelf 18, that projects horizontally over the rear portion of the tray. Fixed in the partition 17 are rearwardly-projecting horizontal spindles 19, on which are adapted to be rotatably arranged the spools of thread and silk. Arranged at the opposite ends of the shelf 18 are compartments 20, in which are fitted cushions 21 for holding pins, needles, and the like. Attached to the inner adjacent walls of the compartments 20 is a slat 22, in which are fitted a plurality of vertical screws 23, corresponding in number to the number of spool-spindles 19. Arranged on each of the screws 23 is a disk or washer 24, and between said disk and the head of the screw is disposed a coiled spring 25, that operates to press the disk or washer against the slat.

Formed in the rear edge of the shelf 18, directly beneath the screws 23, are a plurality of slots 26, forming guides for the thread, and for facilitating the insertion of the thread therein the slots are formed flaring at their outer ends, as shown. A cutter 27, consisting of a flat blade having a knife-edge, is attached to the front edge of the shelf 18 with its cutting edge projecting above the edge of the shelf, as most clearly shown in Fig. 4 of the drawings.

Arranged in the cabinet beneath the tray 13 is a drawer 28, useful for holding work and such articles as cannot conveniently be placed in the tray.

The operation of the thread-holder is as follows: To place the spools in position, the tray is removed from the cabinet and the spools slid onto the spindles 19. A short length of thread or silk is then unwound from each of the spools and the strands are slipped into the slots 26, and thence over the slat 22, and underneath the disks or washers 24. When it is desired to use the thread from any of the spools, the end of the thread is grasped and drawn out until the desired length of thread has been unreeled from the spool, when by exerting a downward pull on the thread it is forced against the edge of the knife 27, and thus severed. The cutter being attached to the forward edge of the shelf at a distance from the tension devices, when the thread is severed a convenient length thereof is left projecting in front of the tension device to be easily grasped when more thread is needed. The tension devices, comprising the screws 23, washers 24, and springs 25, place a yielding tension upon the thread which permits the thread being easily unreeled from the spools, but prevents the spools from unreeling more thread than is desired, and also holds the thread sufficiently to permit it to be drawn over the knife to cut it off without causing more thread being reeled off from the spool by the operation.

The cabinet constructed and arranged in the manner described forms a most convenient and useful article for seamstresses, tailors, and the like, as it not only forms a handy and safe depository for the various different implements and materials within ready reach of the hand; but by means of the spool-holder the particular kind of thread or silk desired may be instantly selected and exactly the amount needed be withdrawn and severed, preventing waste of the thread and silk and guarding it from tangling and kinking. Moreover, by means of the mechanism described the top and front of the cabinet may be simultaneously opened by one hand and the thread may be unwound from the spool and severed by the same hand, thus leaving the other hand free for holding the work.

Having described our invention, what we claim is—

1. In a cabinet having a hinged top and front, the combination with a bell-crank lever pivoted to a fixed support of two links respectively pivoted at their outer ends directly to the hinged top and front, one of said links being pivoted at its inner end to one end of the bell-crank lever and the other being pivotally attached by a slotted connection to the other end of said bell-crank lever, substantially as described and for the purpose specified.

2. In a spool-holder the combination with a tray provided with a plurality of compartments and having a vertical partition fixed intermediate between its front and rear edges, of a shelf fixed on said partition and extending rearwardly over the tray, a plurality of spool-spindles fixed in the partition and projecting rearwardly beneath the shelf, a plurality of tension devices arranged above the shelf and a knife fixed to the front edge of the shelf, the rear edge of the shelf being provided with slotted thread-guides formed in its rear edge beneath the tension devices, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

MARTIN BELVILLE.
WILLIAM OLTMER.

Witnesses:
PHIL ROCHE,
FRANK AVARE.