

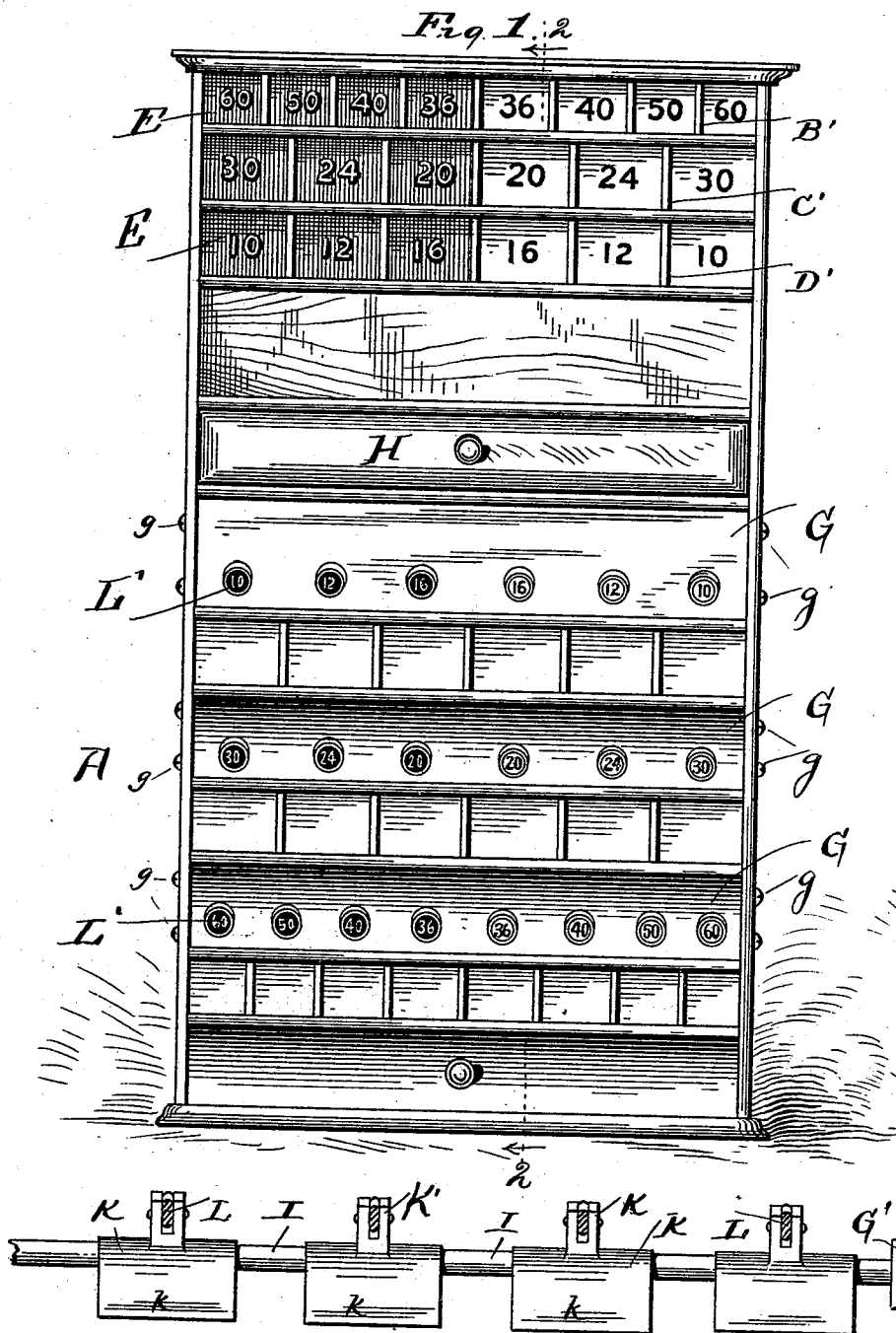
(No Model.)

2 Sheets—Sheet 1.

H. T. LUSTER.
THREAD CABINET.

No. 514,948.

Patented Feb. 20, 1894.



Witnesses.
E. Byron Gilchrist.
[Signature]

Inventor.
Horace T. Luster
By Leggett & Leggett
his attorneys.

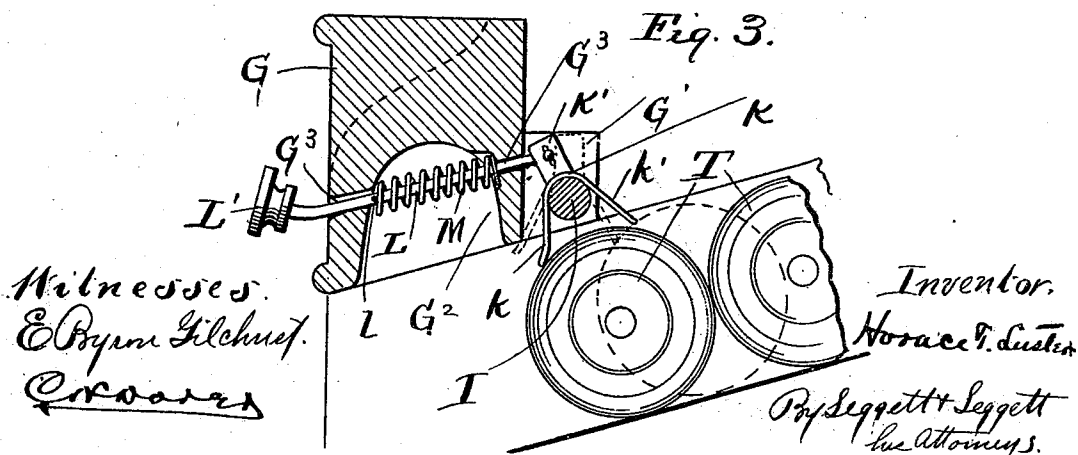
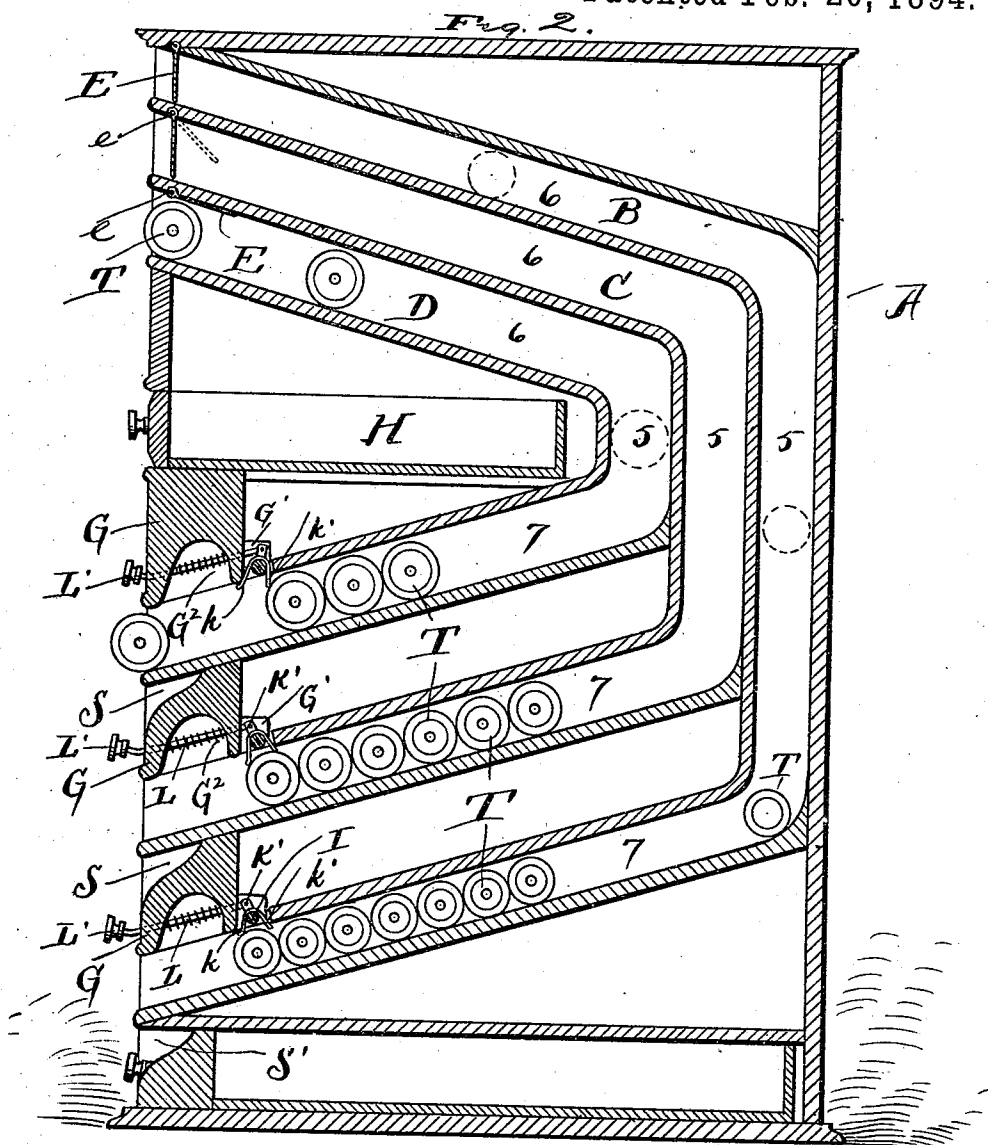
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2 Sheets—Sheet 2.

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THREAD CABINET.

No. 514,948.

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Witnesses:
E. Byron Gilchrist.
C. Rogers

Inventor,
Horace T. Luster
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his Attorneys.

UNITED STATES PATENT OFFICE.

HORACE T. LUSTER, OF BEREHA, OHIO.

THREAD-CABINET.

SPECIFICATION forming part of Letters Patent No. 514,948, dated February 20, 1894.

Application filed June 13, 1892. Serial No. 436,509. (No model.)

To all whom it may concern:

Be it known that I, HORACE T. LUSTER, of Berea, in the county of Cuyahoga and State of Ohio, have invented certain new and useful

5 Improvements in Thread-Cabinets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

10 My invention relates to improvements in thread-cabinets; and it consists, among other things, in a cabinet comprising one or more rows of compartments with the compartments just large enough to accommodate a single

15 row or file of spools with both the receiving and discharging openings of the compartments located at the front side of the cabinet, with the compartments comprising substantially three sections, a central section, and

20 two end sections declining toward and from the central section, respectively, so that the spools of thread will roll by gravity from the receiving to the discharging end of the compartments.

25 My invention consists also in an arrangement of two or more rows of compartments in such a manner that they shall not only occupy as little room as practicable, but so that the one or more of the rows of compartments

30 will be located outside of the other row or rows and consequently be longer and adapted to contain a larger number of spools.

My invention consists, moreover, in the means employed whereby a single spool of

35 thread may be cut-off from the row or file of spools within the compartments.

My invention consists also in certain features of construction and in combination of parts hereinafter described and pointed out

40 in the claim.

In the accompanying drawings, Figure 1 is a front side elevation of my improved cabinet. Fig. 2 is a side elevation in vertical section on line 2—2, Fig. 1, looking in the direction of the arrow T representing spools of thread. Fig. 3 is a vertical section of the block that supports the cut-offs and mechanism whereby to operate the cut-offs, showing also the discharging-end of a thread-holding

45 compartment and illustrating the operation of the cut-off. Fig. 4 is a front side elevation

of a number of cut-offs and the rod or bar upon which they are mounted in common.

A represents the casing of the cabinet.

The cabinet comprises three rows of compartments, B, C, and D, the rows of compartments extending from side to side of the cabinet and arranged the one row C intermediate between the other rows; B', C', and D' representing the partition-walls between the compartments, respectively. Said compartments are adapted to both receive and discharge at the front side of the cabinet and are just large enough to accommodate a single row or file of spools of thread with the spools arranged crosswise of the compartment. Said compartments, in longitudinal section, are preferably of the form shown very clearly in Fig. 2, comprising three sections, viz., a central upright section 5 at or near the rear end of the cabinet, a section, 6, declining toward said central section, and a section, 7, declining from said central section, sections 6 and 7 opening at the front side of the cabinet and being adapted to receive into and discharge from the compartment, respectively, the spools of thread, and section, 6, at its forward or receiving end is preferably provided with a flap-door, E, hinged at the top, as at e, and opening inward. The rows of compartments at sections 6 of the compartments, are preferably contiguous to each other as shown, whereas sections 7 of the compartments in the respective rows of compartments are separated more or less from sections 7 of the compartments in the adjacent row or rows of compartments to accommodate the interposition, at the forward end of the cabinet, between adjacent rows of compartments, of blocks G that extend preferably from side to side of the cabinet as shown in Fig. 1, and are removably secured to the sides of the cabinet-casing by means of screws, g. A corresponding block is also provided above the discharging-end of the compartments in rows of compartments B. The room between said last-mentioned block and the sections 6 of the compartments B may be occupied in any desirable manner, for instance, as shown, partially by a drawer H.

Blocks G have rearwardly-projecting arms, brackets or members G' that support a rod or

bar, I. Rods or bars I extend from side to side of the cabinet, and above sections 7 of the thread-holding compartments immediately below, have mounted thereon a cut-off K.

- 5 Cut-off K comprises preferably a piece of sheet metal bent approximately to the form of an inverted V or U and loosely mounted on the rod or bar. The cut-off necessarily comprises two members, k k' , depending or
10 adapted to depend into the thread-compartment immediately below, the top wall of the compartment being slotted to accommodate the location and operation of the cut-off, member k of the cut-off depending into the
15 compartment in the normal position of the same. The cut-offs are provided with an upwardly-projecting ear or pair of ears K' to which is pivotally attached a rod, I, that extends forwardly through the adjacent block G.
20 Blocks G are grooved or recessed on the under side, as at G^2 , a single groove or recess extending preferably the entire length of the blocks, and rods L extend freely through perforations G^3 in the blocks and
25 through said groove or recess, and terminate outside of the cabinet in buttons L' . Just inside the forward wall of said groove or recess G^2 , rods L are provided with a pin l , between which and the rear wall of said groove
30 or recess is confined a spring, preferably a coil-spring, as at M, mounted on said rods, springs M acting in the direction against pins l that serve as stops to the forward movement of rods L and to compress spring M against
35 the rear wall of groove or recess G^2 .

- In Fig. 2 is shown the manner of entering a spool of thread into a thread-compartment of the cabinet, viz., into a compartment of the inner row of compartments B. The spool
40 rolls down declining section 6, thence drops through section 5 into and rolls down declining section 7, the spools being held from passing out of the compartments by cut-offs K, member k of the cut-off, in the normal position of
45 the same, depending into the respective compartment sufficiently far forward of the center of the top of the spool foremost in the compartment to securely hold said spool against advancing. By pressing or pushing inward
50 on button L' of rod L that is operatively connected with the cut-off, the latter is actuated to elevate the free end of member k of the same, releasing the foremost spool of thread and permitting the same to pass to and out at
55 the discharging-end or opening of the thread-compartment where it may be caught by the person in charge.

- The arrangement of member k' of the cut-off and the distance between the free end of said member and the free end of member k is however, such that member k' will, during
60 the operation of the cut-off to release a spool as just described, enter the thread compartment in advance of the next succeeding spool
65 and thus prevent the discharge of more than one spool at a time. The pressure having been removed from button L' that is opera-

tively connected with the cut-off just operated, the recoil of spring M, that was compressed during the operation of the cut-off, will return the cut-off and operating mechanism to their normal position, member k' of the cut-off withdrawing from the thread-compartment by momentarily pushing the spools back or slightly rolling the spool next to it over to
70 allow it to pass and member k entering the same, the spools within the compartment of course advancing whenever a spool is discharged from the compartment.

The hinged flap-doors at the receiving-ends 80 of the compartments, on their outer side, are provided respectively with a number corresponding to the number of the thread that the said compartments are designed, respectively, to receive, as well as some distinguishing
85 feature to indicate the color of the thread, and buttons L' of the mechanism for operating the cut-offs K likewise bear figures corresponding to the number of the thread contained or to be contained in the compartment with whose
90 cut-off said buttons are respectively connected, and some distinguishing feature to indicate the color of the thread.

Another desirable feature of the cabinet shown consists in the peculiar arrangement 95 of the rows of the thread compartments, as shown, whereby the compartments in one row are adapted to hold a larger or smaller number of spools than compartments in the other rows. Hence the longer compartments
100 are designed for fine threads for which there is a greater demand whereas the compartments of less capacity are designed for threads less fine, or coarse threads, the object being to have the compartments for coarse
105 or fine threads of such relative capacity that they will require re-filling at about the same time and avoid the inconvenience of being obliged to have one row of compartments re-filled before another.

It will be observed that my improved thread-cabinet is more especially designed for stores where thread is retailed, and it will also be observed that by the construction
110 illustrated, should a customer, by mistake, call for or receive a number of thread other than that which he desired, the same can readily be put back into the proper compartment of the cabinet without inconvenience, or material loss of time.

Blocks G that are interposed between adjacent rows of compartments are of such form in cross-section, as to leave a space, S, below the discharging-ends of the compartments next above, whereby, upon releasing
125 a spool of thread from any one of said last-mentioned compartments, by placing the hand, palm side up, in position with the fingers extending into space S thus provided below the discharging-end of the respective
130 compartment, the spool of thread will be discharged directly into the palm of the hand, and a space, S' , for the same reason, should be provided below the discharging-ends of

the compartments in the outermost row of compartments.

What I claim is—

10 In a thread-cabinet, the combination with
5 a row of compartments, of a block, as at G,
located above the discharging ends of the
compartments and removably secured to the
sides of the cabinet, a rod or bar extending
from end to end of and supported by said
10 block, a cut-off for each compartment mount-
ed upon said rod or bar, a rod or member, as
at L, operatively connected with each cut-off
and extending through said block outside of
the cabinet where it terminates in a button

L', a coil-spring, as at M, mounted upon said 15
rod and adapted to act in the direction to re-
tain the cut-off in its normal position, said
block being perforated and grooved or re-
cessed to accommodate the location and opera- 20
tion of the cut-off operating mechanism, sub-
stantially as set forth.

In testimony whereof I sign this specifica-
tion, in the presence of two witnesses, this 14th
day of May, 1892.

HORACE T. LUSTER.

Witnesses:

C. H. DORER,

WARD HOOVER.