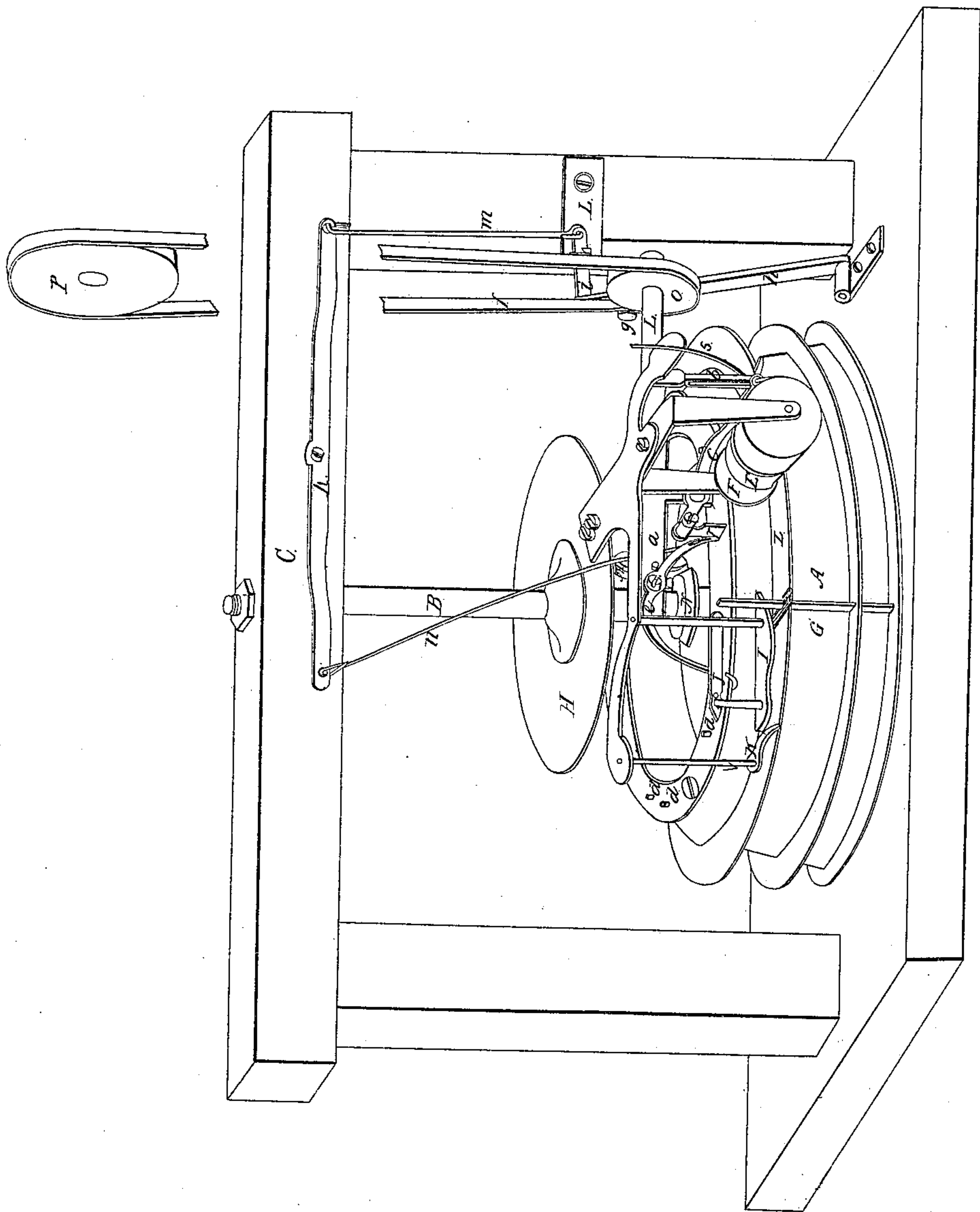


F. L. Buell.
Stop for Knitting Mach.

N^o 25,230.

Patented Aug. 23, 1859.



UNITED STATES PATENT OFFICE.

F. L. BUELL, OF MANCHESTER, CONNECTICUT, ASSIGNOR TO C. G. KENNEY, OF SAME PLACE.

KNITTING-MACHINE.

Specification of Letters Patent No. 25,230, dated August 23, 1859.

To all whom it may concern:

Be it known that I, FREDERICK L. BUELL, of Manchester, county of Hartford, and State of Connecticut, have invented certain
5 new and useful Improvements in Stop-Motions for Knitting-Machines; and I do hereby declare that the same is described and represented in the following specification and drawings, and to enable others
10 skilled in the art to make and use the same I will proceed to describe the construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

15 The nature of this improvement consists in providing an attachment, in, or upon knitting machines, so constructed as to render it nearly or quite impossible for a machine, supplied therewith to drop stitches
20 from the breaking of a thread.

In the accompanying drawing, is shown an imperfect representation of what is called, or known as the French knitting machine.

25 A, is the cylinder, hung and revolving upon a shaft B,—which is secured to the timber C.

D, represents the circle of barb or loop needles.

30 E represents the sinkers.

F is the gear which work into the needles, and keeps the sinkers in uniform position with the needles.

35 G is the flattener placed perpendicular between the needles D, and by which all of the loops on the machine will be thrown off by one revolution of the machine, when a thread breaks, without the use of some efficient attachment to stop the machine at
40 once.

H is a flange secured to the shaft B, and to which the frame-work, which holds the stationary operating parts, such as do not revolve with the cylinder is attached.

45 I, is a cam held in its proper position by the arm J.

K, is a guard to throw the flatteners back after passing the cams I.

50 L, is the driving shaft having a bevel gear M, on the inner end which works into another one N, on the cylinder and having a pulley O, on the other end by which the machine is driven.

55 a is the frame to which the several parts of the attachment is arranged, secured to the flange H.

b is a forked thread guide just in front of the sinker cylinder E.

c is a lever one end of which extends through the fork opening in the thread
60 guide and secured to the frame by a screw, a short distance from the opposite end, and having a trip shoe r secured by a screw to the end of said lever, and hanging therefrom directly over the pins or bolts d which
65 bolts hold the caps over the needles D. e is another lever hung to the frame a just in rear of the lever c one end curved downward the other end, also curved downward having the end bent at right angle there-
70 with, so as to project under the arm J.

P, is a pulley upon the main shafting from which the belt t runs loosely over the pulley O.

g, is a small pulley or idler which runs
75 on a stud pin in the frame or arm h.

i is a catch arm passing through the catch plate j and secured to the frame or arm h.

k is a lever secured to the timber C. 80

m is a connection from the catch arm i to one end of the lever k. n is a connection from the lever e to the other end of the lever k.

s is the thread passing through the thread
85 guide, and over the end of the lever c.

Now when it is desirable to start the machine the arm i is brought forward so as to tighten the belt and is held forward by a catch in the arm i to the plate j, the thread
90 is passed through the guide b and over the end of lever c to the sinkers E. Should a thread break the end of the lever c will rise, the trip shoe r will fall, the bolt heads or pins will strike the shoe r moving it for-
95 ward against the lever e which lifts the arm J, allowing the cam I, to fall back, from the pressure of the flatteners G, thus preventing the stitches being thrown off the needles, also when the lever e, is pressed down it
100 pulls upon one end of the lever k, and by the connections m, n, the arm i is lifted in the plate j, letting the small pulley or idler fall back, slacking the belt t, thus stopping the machine till the thread or threads
105 are mended.

It will be seen that the device may be changed, in its form and construction in order to accomplish the object of relieving the cam I, and allowing it to fall back so
110 as to prevent the stitches being thrown off the needles, and slacking the belt so as to

stop the machine. I do not therefore wish to be confined to the exact construction, and arrangements here employed (also it will be necessary to change somewhat the arrangement, in adapting it to the horizontal machines) so long as the same device, substantially, is employed.

The advantage derived by the use of this attachment over others now in use are, first, its complete and successful operation to accomplish the desired object, not heretofore done. Second, it makes a very great saving of labor, prevents a large amount of waste in stock and goods, and a much greater amount of goods can be made in a given time.

What I claim and desire to secure by Letters Patent is—

1. Attaching the mechanical device above set forth to a knitting machine, namely the thread guide *b*, lever *c*, *e*, and arm *i* substantially in the manner and for the purpose as described. 20

2. The arrangement of the lever *k* connections *m*, *n* frame *h* and arm *i* substantially as described and for the purpose set forth. 25

FREDERICK L. BUELL.

Witnesses:

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