

S. E. JEWETT.  
Belt-Tighteners.

No. 151,705.

Patented June 9, 1874.

Fig. 1.

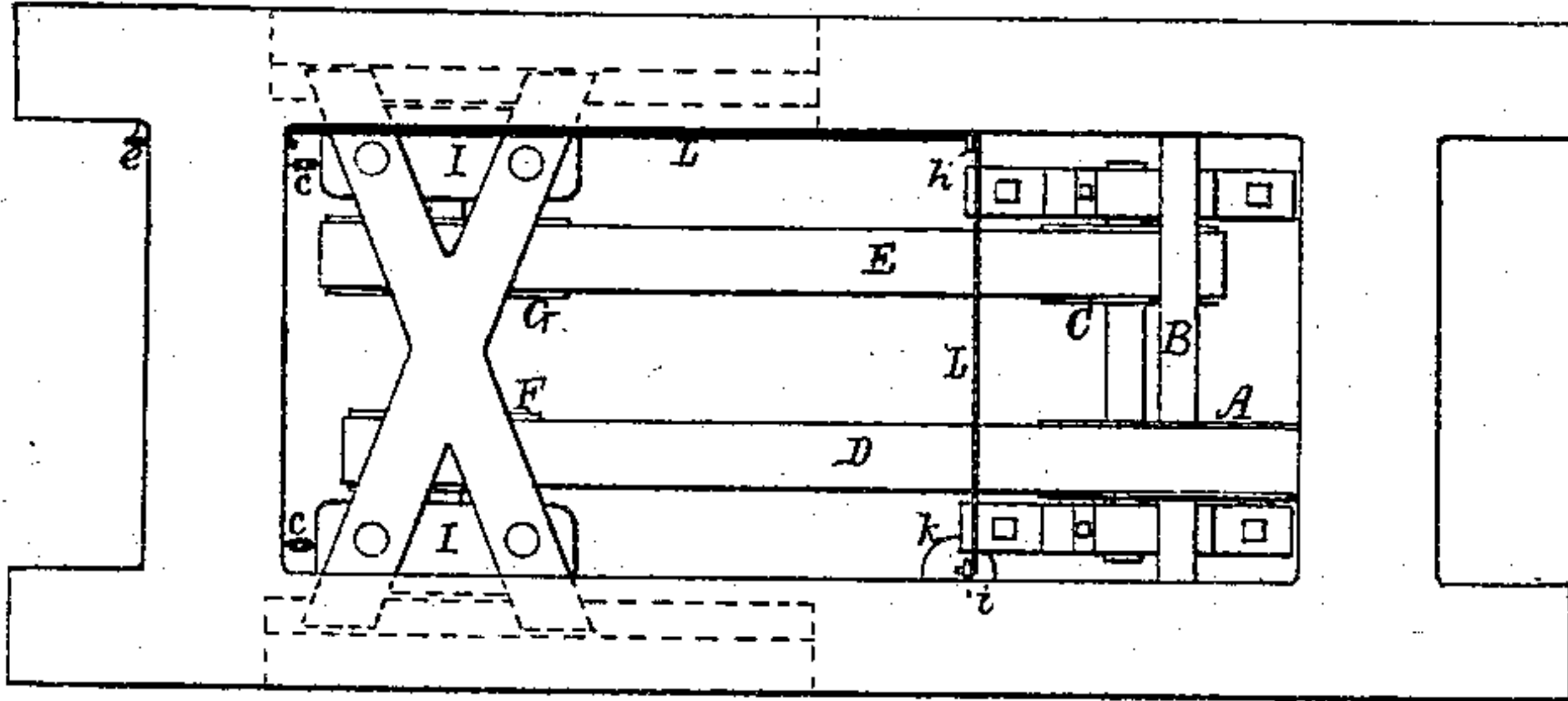


Fig. 2.

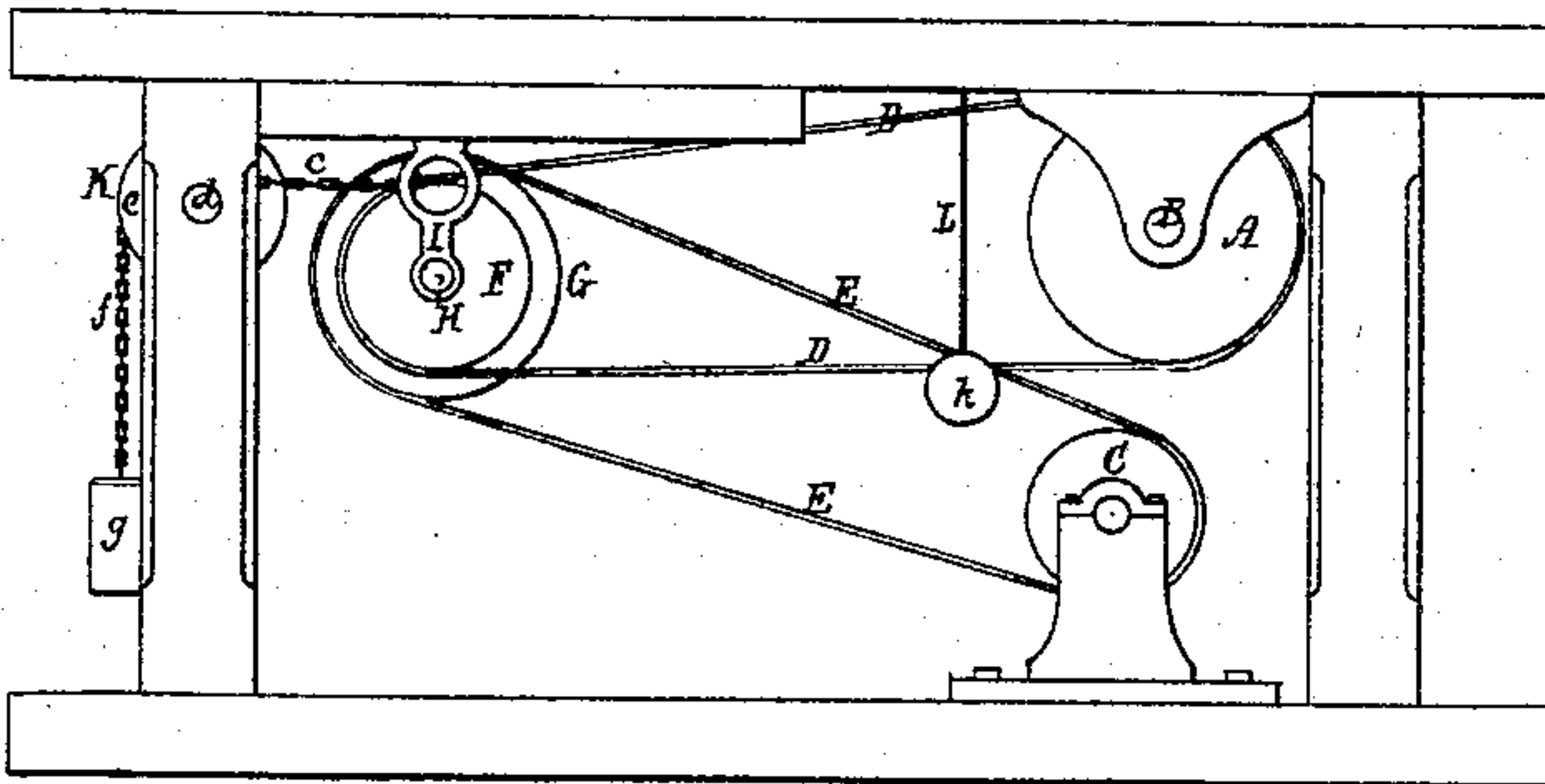


Fig. 4.

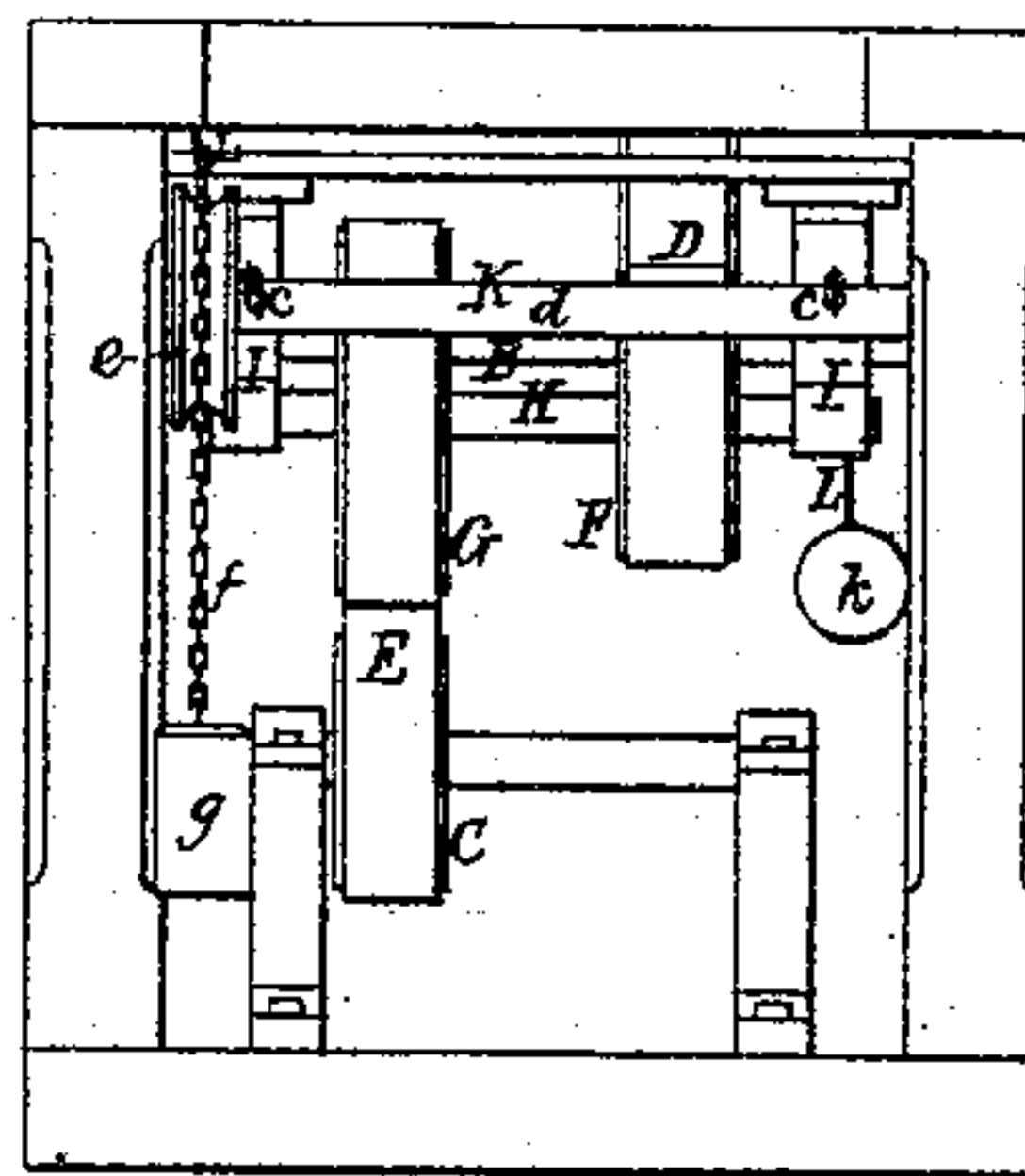
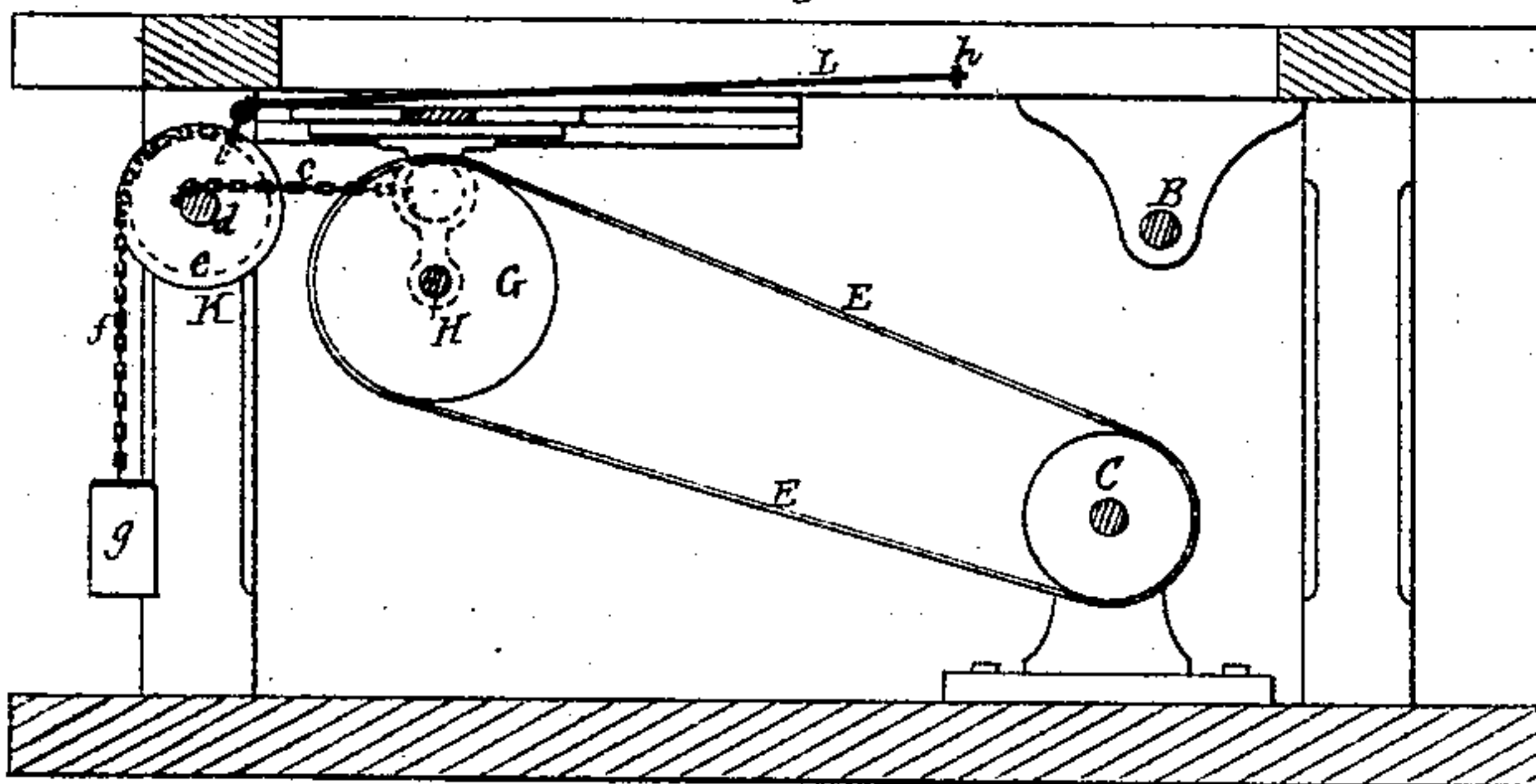


Fig. 3.



Witnesses  
J. H. Fisher  
L. N. Hiles

S. E. Jewett.  
by his attorney  
R. M. Sady

# UNITED STATES PATENT OFFICE.

SEWELL E. JEWETT, OF HAVERHILL, MASSACHUSETTS.

## IMPROVEMENT IN BELT-TIGHTENERS.

Specification forming part of Letters Patent No. **151,705**, dated June 9, 1874; application filed May 13, 1874.

*To all whom it may concern:*

Be it known that I, SEWELL E. JEWETT, of Haverhill, of the county of Essex and State of Massachusetts, have invented a new and useful Belt-Tension Mechanism; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 a longitudinal section, and Fig. 4 an end view, of a belt-tension mechanism provided with a safety-line, in accordance with my invention.

On the 22d day of July, A. D. 1873, Letters Patent No. 141,004, for a belt-tension apparatus were granted to me. I have combined with such mechanism or the equivalent thereof, as hereinafter described, and shown in the accompanying drawings, a weighted line, so arranged that in case a person should be caught by one of the belts while in operation, and drawn upward or along by it, he may be carried against the line, or be able to grasp and pull it so as to effect the relief of the belt or belts from the force of tension, in order that by the slacking of such belt or belts, accident or injury to the person may be prevented or avoided.

In my present belt-tension apparatus, I use a wheel and axle instead of the levers, as shown in my patented mechanism, and instead of a pendulous hanger, for supporting the shaft of the draft-mechanism pulleys, I employ a hanger to slide horizontally.

In the drawings, A denotes the driving-pulley fixed on a shaft, B. From this pulley the driving-belt D extends to and about the pul-

ley F fixed on a shaft, H, supported by the horizontally-sliding hanger I. There is fastened on the shaft H another pulley, G, about which, and the pulley C to be driven, the auxiliary belt E runs. From the sliding hanger two chains, *c c*, extend to the barrel *d* of a windlass, K, from the circumference of whose wheel *e*, a chain, *f*, depends, and carries a weight, *g*. The chain *f* may be fixed at its upper end to a pin simply inserted in a hole bored in the windlass-wheel down its periphery radially. To such pin or to the periphery of the wheel, the safety-line L is to be fastened, it being led through eyes *h i*, and across the belts, and provided with a weight, *k*, fixed to it at its lower end, all being as shown.

It will be seen that the tension of the belts is effected by the action of the windlass, and its chains and weight upon the hanger, and that by turning back the windlass, or by detaching the weight depending therefrom, the belts will at once be relieved from tension. This can be effected by the safety-line, either by a person when caught by one of the belts being carried forcibly against the line, or by his pulling on it. As a safety device it is a valuable addition to a belt-tension apparatus.

I claim—

In combination with the belt-tension mechanism, substantially as described, the safety-line L, applied to the windlass-wheel and arranged with relation to the belts, as and for the purpose set forth.

SEWELL E. JEWETT.

Witnesses:

CHAS. COFFIN,  
DAVID B. TENNEY.