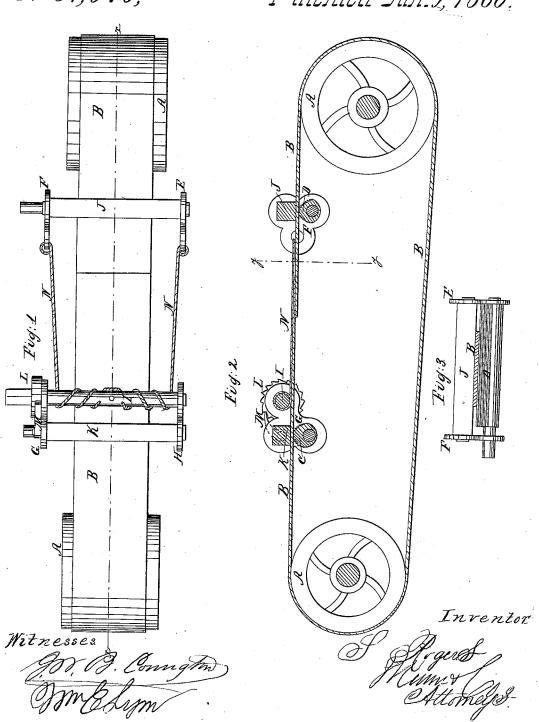
S. Rogers,

Bell Fastener,

Nº 251,970,

Patented Jan. 9, 1866.



UNITED STATES PATENT OFFICE.

SEYMOUR ROGERS, OF PITTSBURG, PENNSYLVANIA.

IMPROVED BELT-STRETCHER.

Specification forming part of Letters Patent No. 51,970, dated January 9, 1866.

To all whom it may concern:

Be it known that I, SEYMOUR ROGERS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Belt-Stretchers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top or plan view of my improved belt-stretcher applied to a belt. Fig. 2 is a vertical longitudinal section of the same through the line x x, Fig. 1. Fig. 3 is a vertical cross-section through the line y y, Fig. 2.

Similar letters of reference indicate like

parts.

The object of my invention is to furnish a belt-stretcher which may be applied to belts of any breadth, which may be applied and operated by one man, and by means of which the work may be done in one-quarter of the time required when the ordinary belt-stretchers are used; and it consists of the combination of rollers, square shafts or cylinders, ratchet-wheels and pawl, end pieces, and rope, as hereinafter more fully described.

A is the pulley around which the belt B

passes.

C D are eccentric rollers revolving in bearings in the end pieces, EF and GH. The rollers C and D are enough shorter than the distance between plates E H and G F to allow the said rollers to be slipped so far toward the plates or end pieces, G F, as to allow their axles to be withdrawn from the plates E H. Then the plates E may be thrown back out of the way and this part of the stretcher removed from the belt; but in the case of the other part of the stretcher the rollers C and I have both to be withdrawn from the end piece, H, before said end piece can be thrown back and the stretcher removed from the belt B. The surface of the sides of the eccentric rollers C and D farthest from the axis is grooved or serrated to prevent its slipping upon the belt B.

Directly above the rollers C D are square shafts or cylinders J K, against the lower faces

of which the belt is clamped by the eccentric rollers D C. The square part of the shafts J K is of the same length as the distance between the plates F E and G H, to which they are securely attached.

Upon the axle of the roller I, projecting beyond the end piece, G, is attached a ratchet-wheel, L, into the teeth of which catches the pawl M, pivoted to the projecting axle of the square shaft K; or it may be pivoted to the

end piece, G, if desired.

To ears formed on the end pieces, E F, is attached a band, rope, or chain, N, which is also attached to the roller I, around which it is wound when the belt is stretched. The rope N may be attached to the roller by passing through holes formed in said roller, or in any

other way.

The two parts of the stretcher should be applied to the belt at a sufficient distance apart to allow the belt to be stretched or drawn up to the proper degree of tautness, when it may be fastened in any of the ordinary ways and the stretcher removed from the belt, as before described. The rope or band N is wound around the roller I and the belt stretched by means of a crank applied to the projecting end of the roller I.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent—

1. The combination of the eccentric rollers C and D with the square shafts K and J, substantially as described, and for the purpose set forth.

2. The combination of the roller I with the end pieces, G and H, ratchet-wheel L, and pawl M, substantially as described, and for the pur-

pose set forth.

3. The combination of the rope N, or its equivalent, with the end pieces, F and E, and roller I, substantially as described, and for the purpose set forth.

The above specification of my invention signed by me.

SEYMOUR ROGERS.

Witnesses:

JAMES M. TAYLOR, ABRAM W. WALL.