

G. E. More.

Shingle Binder.

N^o 95,127.

Patented Sep. 21, 1869.

Fig. 1.

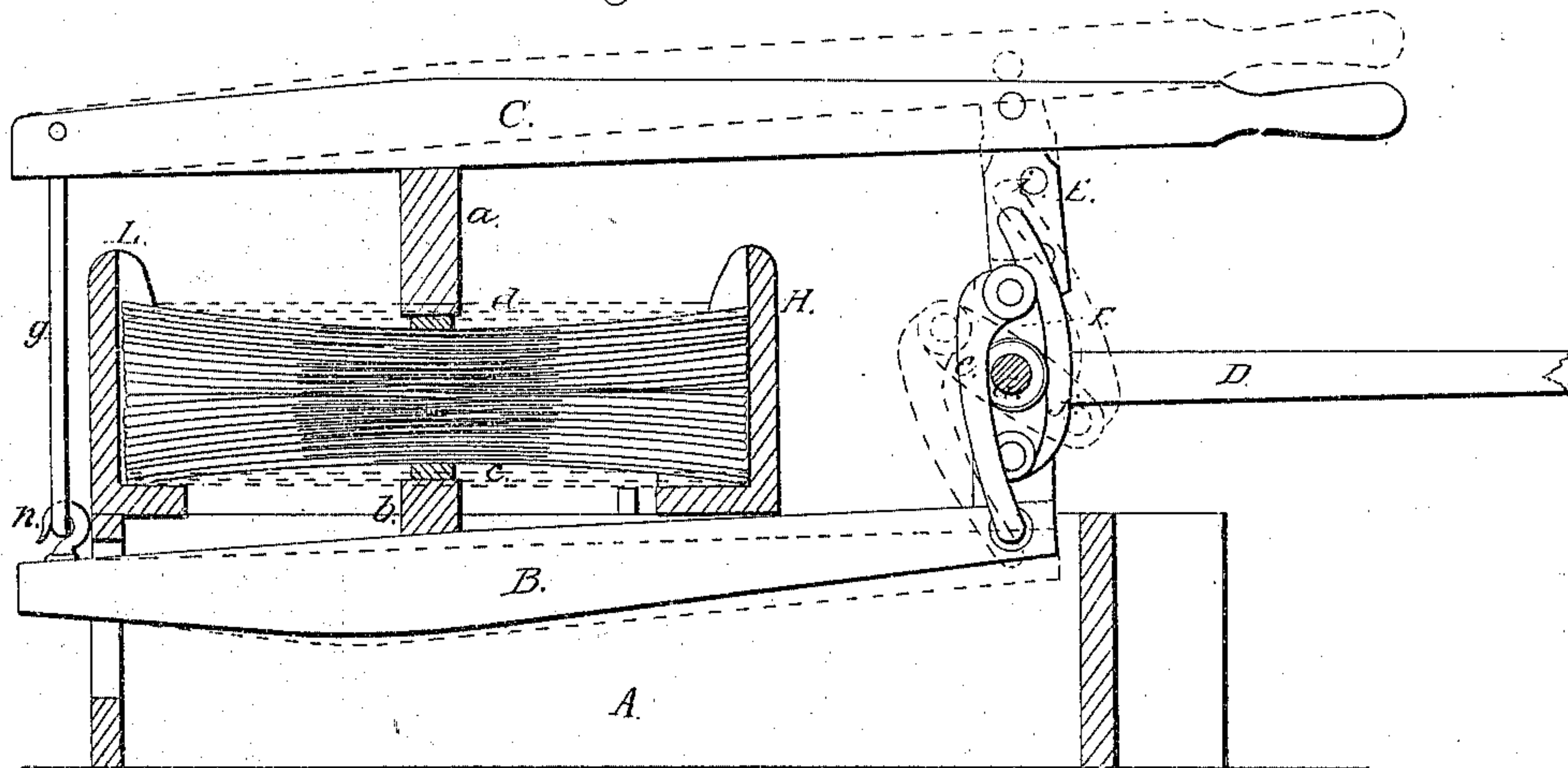
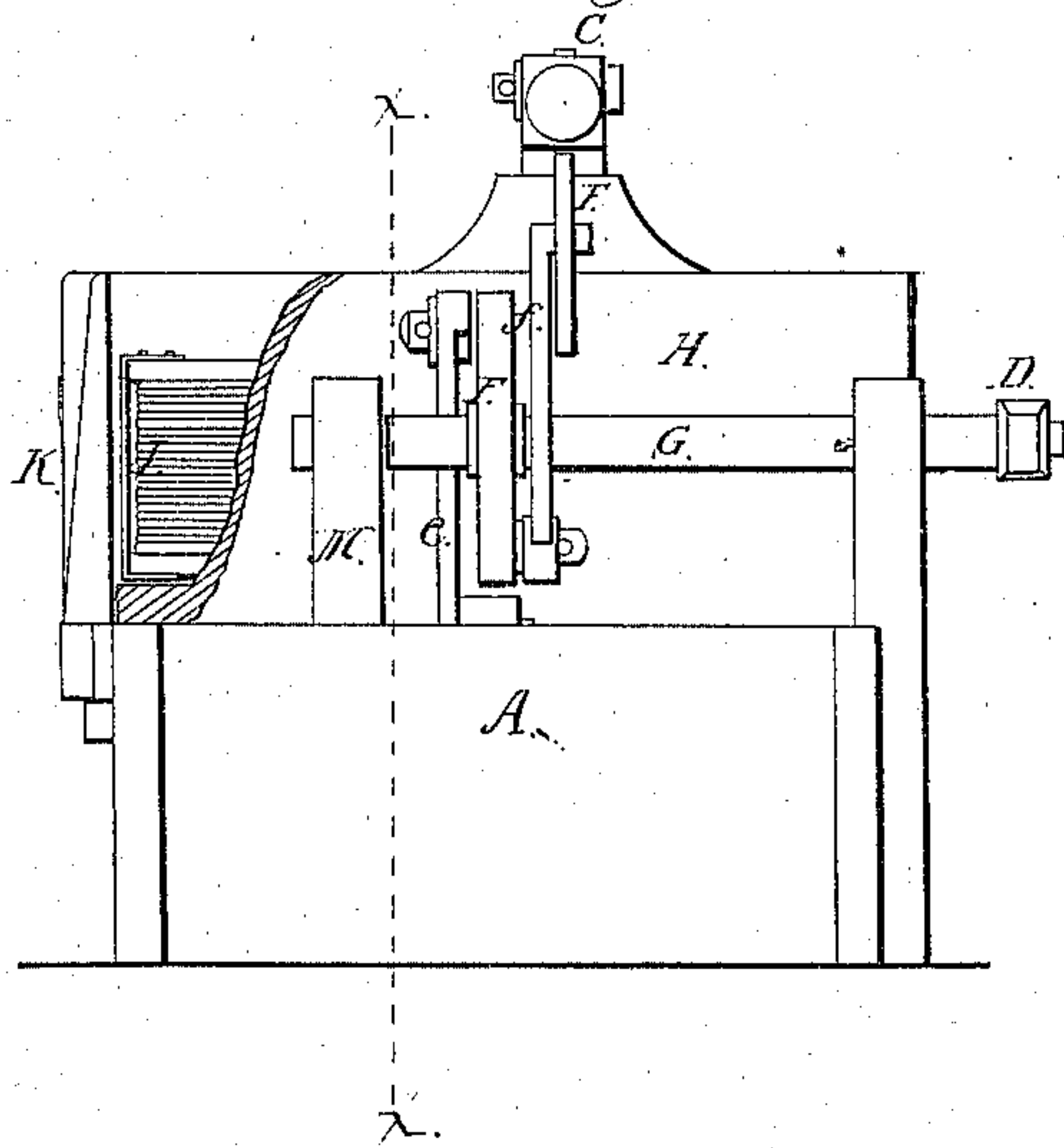


Fig. 2.



Witnesses:

L. Hailer
P. T. Dodge,

Inventor:

G. E. More
by Dodge & Munn
her attys

United States Patent Office.

GEORGE E. MORE, OF ROYALTON, WISCONSIN.

Letters Patent No. 95,127, dated September 21, 1869.

IMPROVEMENT IN SHINGLE-BINDER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, GEORGE E. MORE, of Royalton, in the county of Waupacca, and State of Wisconsin, have invented certain new and useful Improvements in Shingle-Binders; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention relates to shingle-binders; and consists in the novel construction and arrangement of certain mechanical devices in a machine for conveniently and rapidly binding shingles in bundles.

In the drawings—

Figure 1 is a longitudinal vertical section of my machine on the line *x-x* of fig. 2, and

Figure 2 is an end view, with a portion broken away.

In constructing my machine, I make a frame, A, of any desired size, and out of any suitable material, with an elevated back-piece, L, rigidly attached, and a corresponding front-piece, H, arranged to slide on the frame, and both provided with narrow bottom and side-pieces, for supporting the thick ends of the shingles, and keeping their sides even or square while being bunched, as clearly shown in fig. 1.

Midway between the front and back-pieces L and H, I insert in the sides of the frame A, stakes, K, to keep the sides of the small ends of the shingles even, as shown in fig. 2.

In standards M, rigidly connected to the front end of the frame A, I mount a shaft, G, and to it securely fasten arms, F, so as to be near the middle of the end of the frame, and to its ends pivot hooks *e* and *f*.

The hook *e*, I connect to one end of a lever, B, which is located centrally, lengthwise of the frame, under the end-pieces H and L, as shown in fig. 1.

Its rear end extends to and projects a short distance beyond the rear end of the frame, where it is provided with a hook, *h*, as clearly shown in fig. 1.

The rear end of this lever B, I connect with the rear end of another lever, C, by means of a rod, *g*, and the hook *h*; and near the front end of the latter lever, immediately over the shaft G, I pivot a coupling-plate, E, provided with two or more holes, *i*, as clearly shown in the same figure.

To the levers B and C, I attach cross-pieces *a* and *b*, so as to be in line with the stakes K; and to the outer end of the shaft G, I attach a hand-lever, D.

In operating my machine, I connect the hook *e* to

the front end of the lever B, and then lay a lower or under binder, *c*, on the cross-piece *b*, having first nailed to it metallic straps, J, as seen in fig. 2. I then adjust the sliding piece H, so as to give the desired length to the bundle, and arrange the requisite number of shingles in the usual manner between the pieces L and H.

Over the shingles thus arranged, I place an upper binder, *d*, in line with the under binder *c*. This done, I connect the rear ends of the levers B and C, bring the cross-piece *a* down upon the binder *d*, and press down the front end of the lever B, and connect the hook *f* to one of the holes in the coupling-plate E, placing it in the highest one that can be reached by pressing down on the lever.

The levers B and C, with the arms F and their hooks, and the shingles, are then in the position nearly as shown by the red lines in fig. 1. I then press down on the hand-lever D, and bring all the parts into the position shown by the dark lines, when the shingles are ready to be bound or fastened together, and this I do by carrying the metal straps J over the ends of the upper binder *d*, and nailing them fast.

I now release the coupling of the lever C, first raising up the hand-lever D for that purpose, take out the bundle of shingles, and proceed to bind another in the same manner, and so on till all are bound.

It should be understood that the hooks *e* and *f* are curved or bent, as represented in fig. 1, so that when the lever D is turned down, their ends, pivoted to the arms F on shaft G, will be thrown a little past the centre, which will serve to lock the parts in position, so that the operator can leave the lever D and nail the bands or straps J, one person thus binding and nailing the bands also.

I do not claim, broadly, the use of two levers operated by a rock-shaft, in the manner described, as such a mechanical-device has before been used in other machines; but

Having thus described my invention,

What I claim, is—

A shingle-binding machine, consisting of the frame A, with the end-pieces L and H, the stakes K, and levers B C, provided with the cross-pieces *a b*, and operated by the rock-shaft G, and curved hooks *e f*, all constructed and arranged to operate substantially as described.

GEORGE E. MORE.

Witnesses:

W. F. WATERHOUSE.

PETER MEIKLEJOHN.