

No. 762,563.

PATENTED JUNE 14, 1904.

R. J. THOMPSON.
SHINGLE MACHINE.

APPLICATION FILED APR. 9, 1903.

NO MODEL.

Fig. 1.

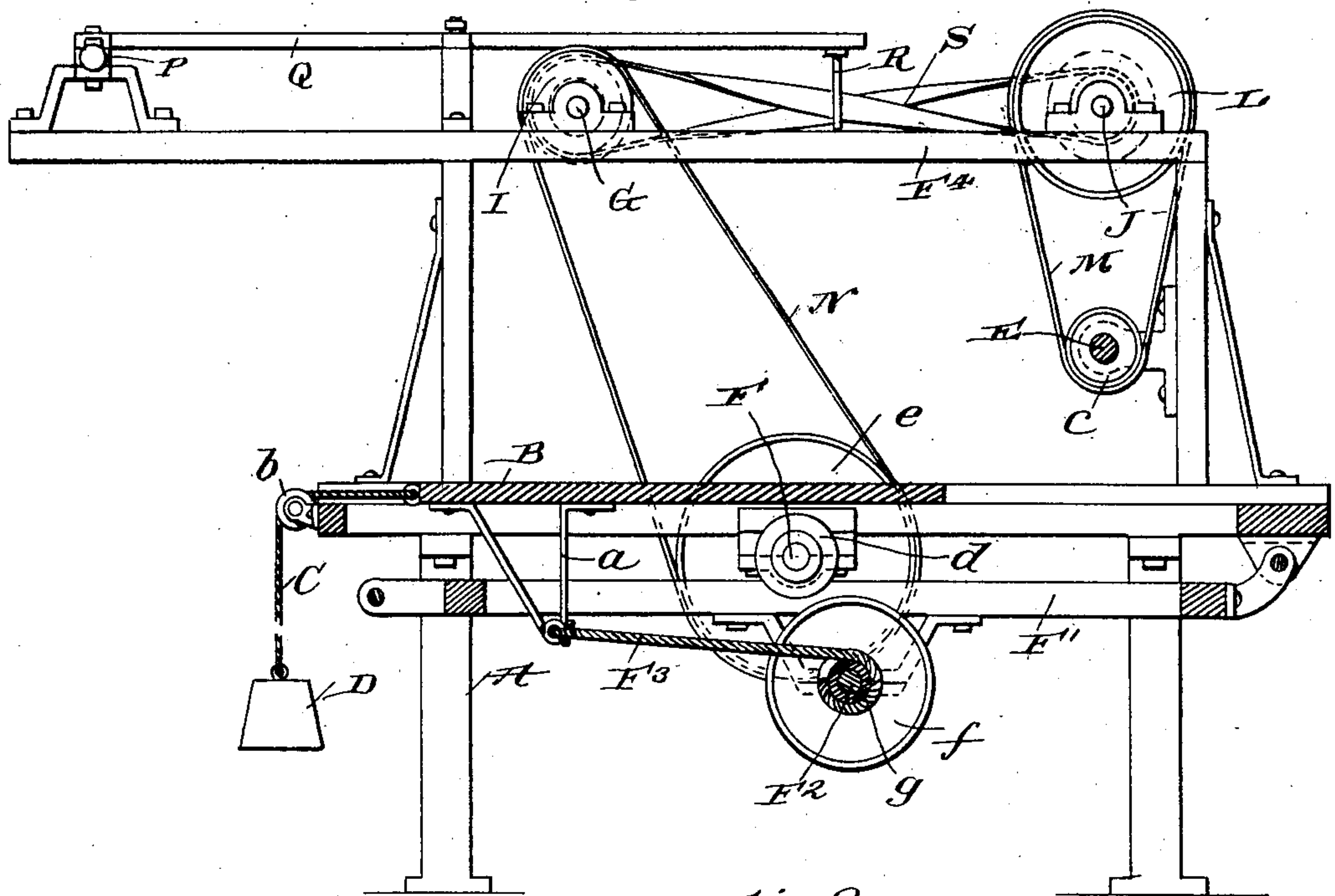
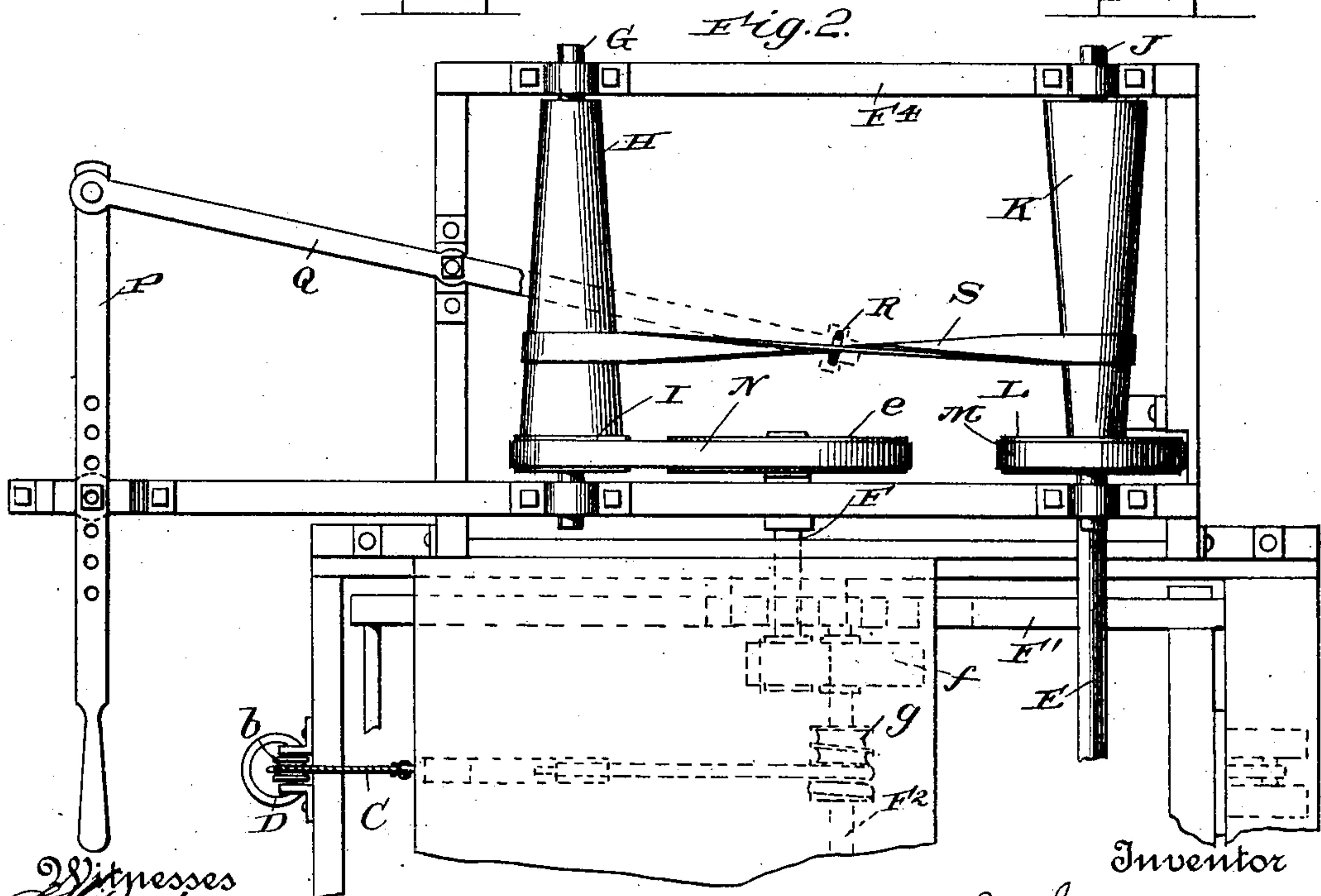


Fig. 2.



Witnesses
Chas. J. Healy
 N. C. Healy

Inventor

By *P. J. Thompson*
James J. Shuck Attorneys

UNITED STATES PATENT OFFICE.

ROBERT J. THOMPSON, OF ALPENA, MICHIGAN.

SHINGLE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 762,563, dated June 14, 1904.

Application filed April 9, 1903. Serial No. 151,843. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. THOMPSON, a citizen of the United States, residing at Alpena, in the county of Alpena and State of Michigan, have invented new and useful Improvements in Shingle-Machines, of which the following is a specification.

My invention relates to shingle-machines, and more particularly to means for feeding the carriages thereof; and it consists in the peculiar and advantageous construction hereinafter described, and particularly pointed out in the claim appended.

In the accompanying drawings, Figure 1 is a longitudinal vertical section with some of the parts in elevation of so much of a shingle-machine as is necessary to illustrate my improvements. Fig. 2 is a top plan view of the same with the frame and the carriage partly broken away.

Similar letters of reference designate corresponding parts in both views of the drawings, referring to which—

A is the main frame of a shingle-machine; B, a carriage movable longitudinally on said frame and having a depending arm *a*; C, a cable passed over a sheave *b*, mounted in the frame and connected at one end to the carriage; D, a weight connected to the opposite end of said cable and having for its purpose to draw the carriage rearwardly, and E a transverse shaft journaled in bearings on the frame and provided with a pulley *c*. Said shaft E is also designed to bear a saw and a pulley, which I have deemed it unnecessary to illustrate, the pulley having for its purpose to receive a belt (also not shown) from a motor.

F is a short shaft journaled in bearings on the frame A and provided with a friction-wheel *d*, preferably a paper friction-wheel, and also with a band-pulley *e*; F', a vertically-movable lever fulcrumed at one end on the frame and designed to be raised and lowered by the machine attendant; F², a shaft journaled in bearings carried by said lever and provided with a friction-wheel *f*, preferably of iron, arranged to engage the paper wheel *d* and also provided with a spirally-grooved drum *g*; F³, a cable connected to the arm *a* on carriage B and also connected to and designed to be

wound upon the drum *g*; F⁴, a supplemental frame fixedly connected to the main frame A and disposed in a vertical plane at one side of that of said main frame; G, a transverse shaft journaled in bearings on frame F⁴ in a horizontal plane considerably above that of the carriage B and bearing a cone-pulley H and a pulley I; J, a transverse shaft, also journaled in bearings on the frame F⁴ and bearing a cone-pulley K, disposed opposite to the pulley H, and a pulley L; M, a belt connecting the pulley *c* on the shaft E and the pulley L on shaft J; N, a belt connecting the pulley I on the shaft G and the pulley *e* on the shaft F; P, a hand-lever fulcrumed, preferably, in an adjustable manner, Fig. 2, on the frame F⁴ in a plane to clear the head of the attendant; Q, a lever having one arm connected to the hand-lever and its other arm equipped with a loop or eye R, and S a crossed belt passed around the oppositely-disposed cone-pulleys H and K and through the loop or eye R of lever Q.

In virtue of the connections described it will be observed that when the machine is in operation motion will be transmitted from the shaft E to the friction-wheel *d* through the pulley *c*, band M, pulley L, cone-pulley K, band S, cone-pulley H, pulley I, band N, band-pulley *e*, and shaft F. Also when the lever F' is raised by the attendant to place the disk *f* in frictional engagement with the disk *d* the cable F³ will be wound on the drum *g* and the carriage B moved forwardly. It will also be observed that in order to increase or diminish the speed of the forward movement of the carriage the operator has but to rock the hand-lever P, and thereby change the position of the band S on the cone-pulleys H K. This latter will be appreciated as an important advantage when it is remembered that it is desirable to feed small and soft blocks of wood to the saw fast and hard and knotty blocks slow. At the completion of each forward movement of the carriage B the attendant lowers the lever F' to disengage the friction-disk *f* from the friction-disk *d*, when, as before described, the weight D will operate to return the carriage to its rear position ready for another forward movement.

The gearing described for transmitting motion from the shaft F to the carriage B to move the latter forward is materially advantageous, since when the disk *f* is placed in frictional engagement with the rapidly-revolving disk *d* the carriage is immediately moved forward without shock or jar and also without wear and tear on any of the parts. This assures the production of a large number of smooth shingles in a short period of time.

When desired, the spring common to shingle-machines may be used in lieu of the weight D to return the carriage B to its rear position subsequent to a forward movement of said carriage.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my invention as claimed.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

30 In a shingle-machine, the combination of a main frame A, a supplemental frame F', fixedly connected to the main frame, disposed in a vertical plane at one side of that of said main

frame and extending upwardly a considerable distance above the main frame, oppositely-disposed, transverse cone-pulleys mounted on the top of the supplemental frame, a crossed belt connecting said cone-pulleys, a longitudinally-disposed, horizontal lever Q, fulcrumed on the top of the supplemental frame, and having a loop R at one end receiving the crossed belt, a horizontal hand-lever P fulcrumed on the top of the supplemental frame at a point in a vertical plane in rear of that of the main frame, and connected to the other end of the lever Q, a shaft F journaled in the main frame, and bearing a friction-wheel and a band-pulley, a shaft E bearing in the supplemental frame, and provided with a band-pulley, a belt connecting the pulley on shaft E and one of the cone-pulleys, a belt connecting the other cone-pulley and the shaft F, a friction-wheel *f* movable into and out of engagement with the friction-wheel on shaft F, a drum fixed with respect to said wheel *f*, a vertically-movable lever carrying the wheel *f* and the drum, a carriage movable longitudinally on the main frame, and a cable connecting the drum and said carriage.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT J. THOMPSON.

Witnesses:

DONALD LE ROY,
GEORGE B. HOLMES.