

*P. O. Sherwin,
Sawing Shingles,*

Nº 15,747,

Patented Sep. 16, 1856.

Fig 1

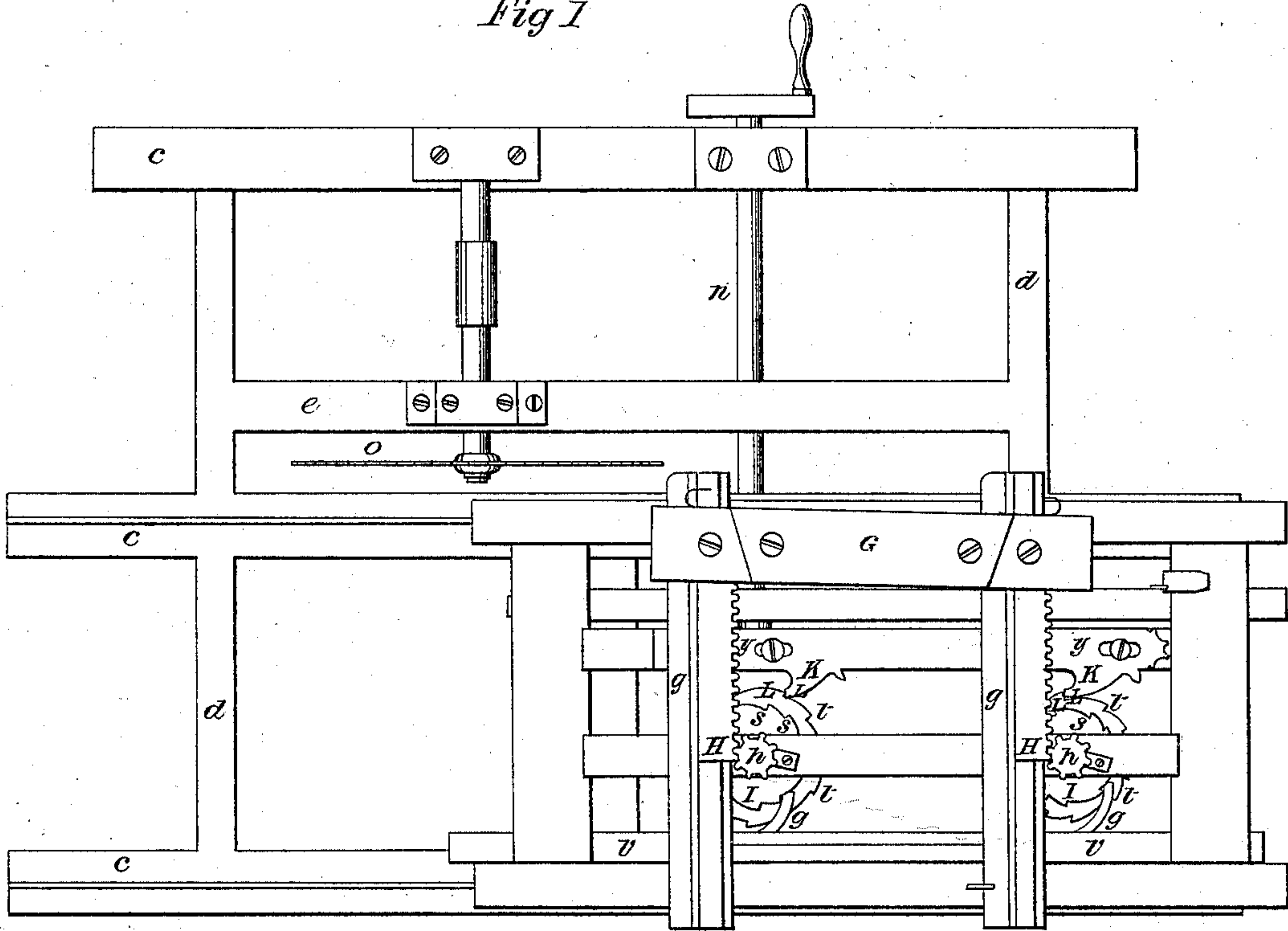
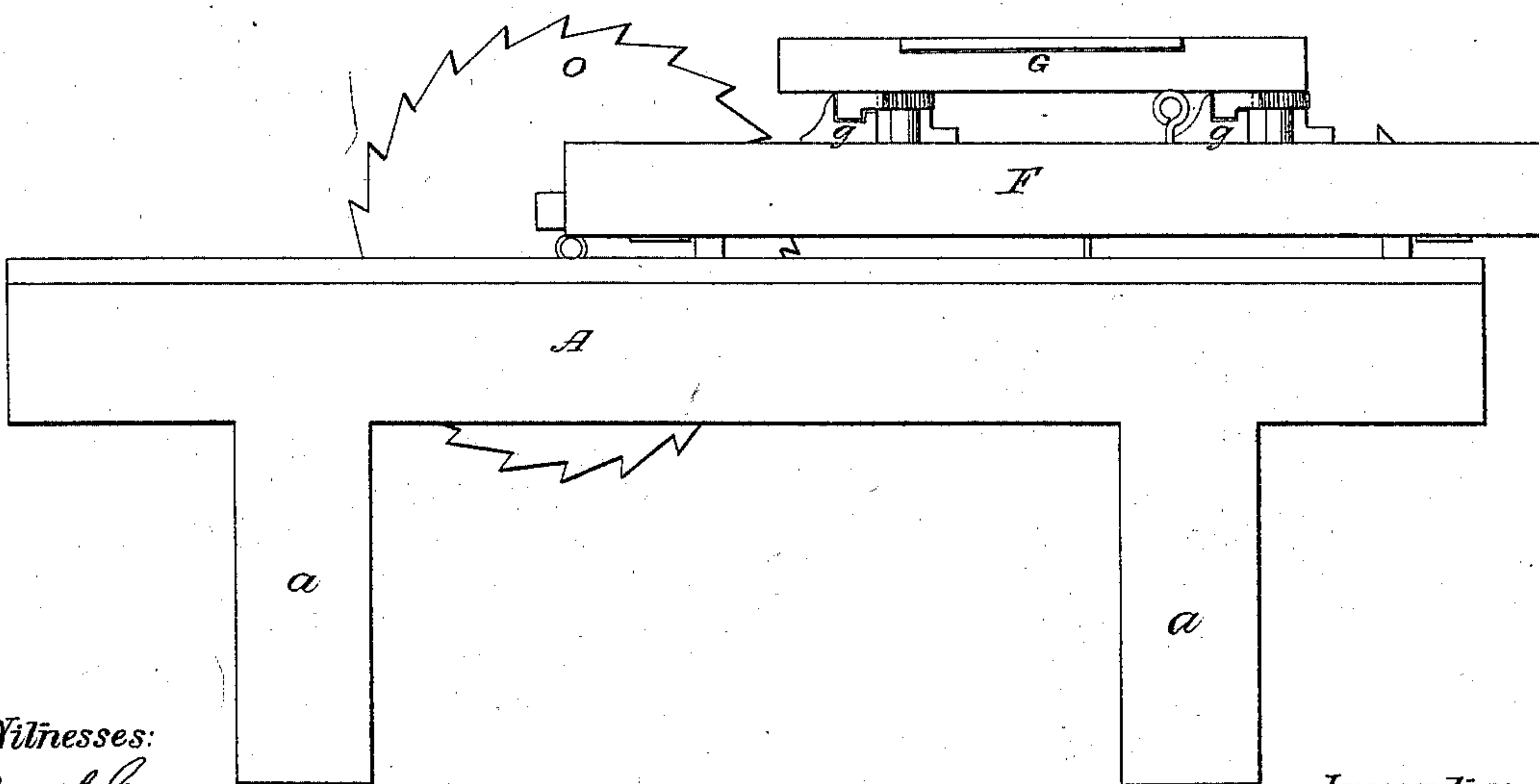


Fig 2



Witnesses:

*Orrin Green
J H Clark*

Inventor:

Phil O Sherwin

UNITED STATES PATENT OFFICE.

P. O. SHERWIN, OF JAMESTOWN, NEW YORK.

SHINGLE-MACHINE.

Specification of Letters Patent No. 15,747, dated September 16, 1856.

To all whom it may concern:

Be it known that I, PHILLO O. SHERWIN, of Jamestown, in the county of Chautauqua and State of New York, have invented an
5 Improvement in Machines for Sawing Shingles; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference
10 marked thereon.

The nature of my invention consists in providing adjustable stops in combination with appropriate notches or teeth on set
15 wheels in order that the carriage carrying the block of wood to be sawed into shingles may be stopped in an easy manner at the precise point desired and thereby the shingles be made of uniform thickness.

To enable others skilled in the art to
20 make and use my invention I will proceed to describe its construction and operation.

The main frame of the machine is made of timber framed together in the usual manner for machines of this class. There is nothing
25 new in the frame which I claim, and I will not therefore be very minute in its description.

In the drawings accompanying this specification and forming a part thereof Figure
30 I represents a top plan view and Fig. II a side view.

A, *a, a*, gives a side view of the main frame and *c, c, c, d, d*, and E a top view of the main timbers of the frame.

35 At F, Fig. I is represented a side elevation of the carriage frame which moves upon the main frame and carries the timber to the saw.

At G, *g, g*, Fig. II is represented a side
40 elevation of the feed block to which the timber to be sawed into shingles is fastened. This feed block G, *g, g*, Figs. I and II rests upon the carriage and moves with it and is also moved in a transverse direction by
45 means of the rack and pinion H *h*. The timber is held on the face side of the block G, by means of dogs or sets. The pinion *h*, is upon the same shaft with the set wheel I. The set wheels *i, i*, have two sets of notches
50 or teeth (*s, s*, and *t t*) which teeth catch and hold in opposite directions. Into one set of these teeth (*s*) the spring pawl J, works. This pawl is connected to a movable timber (*v, v*), which timber is moved with the carriage in one direction and by a spring or
55 weight in the other direction. There is a

pin passing through the timber (*v, v*), which (as the carriage moves upon the main frame and at the proper point) strikes a stop on the main frame and stops the back- 60 ward motion of the timber *v*, (the carriage continuing to move until the teeth, *t*, strike the stops K,) the pawls at the same time catching the teeth *s*, the set wheels are turned the proper distance (and with them 65 the pinions working in the racks) to set the timber for the action of the saw. The set wheels I I have an onward movement with the carriage. The notches or teeth in the set wheels are unequal distances apart and so 70 arranged that one pawl will catch the tooth over a long distance in one wheel while the other pawl will catch the tooth over a short distance in the other wheel and thus the timber on the feed block will be fed to the 75 saw on an angle sufficient to form the butt and tip or the thick and thin end of the shingle and this angle being alternately reversed the timber is all used without waste (the stops K, K, operating to prevent any 80 inequality in the thickness of the shingles). The stops which I claim as my invention are represented at K, K, Fig. I. They are formed of one piece of metal either cast or wrought substantially in the form repre- 85 sented in the drawing and fastened to the main frame at the precise point required. It has two long slits as shown at *y, y*, through which slits pass screws to fasten it to the main frame. By means of the screws and 90 slits its position on the frame may be varied so as to accommodate it to the length of shingle to be made as well as to the distance the carriage is to move on the frame and the precise point the carriage is to be stopped. 95 It is an object to stop the carriage at the precise point when the saw has passed through the timber and this should be done without a "slam" or wrench of the carriage and without the least movement of either 100 the pinion or the rack. Machines of this class as now used without this improvement make shingles of unequal thickness and are liable to be injured and thrown out of order for the reason that the carriage is stopped 105 imperfectly and strikes or "slams" suddenly and with great force; insomuch as to move the rack and pinion and thereby make shingles of unequal thickness. With this improvement the stops operate gently upon 110 the set wheels and the carriage stopped at the precise point required and the "slam-

ming" and injury to the machine is avoided and the shingles made of uniform thickness.

The notches or teeth, t , in the two set wheels catch the stops at the same time as represented at L L, L L Fig. I. The notches or teeth, t , in the set wheels as applied and used in this arrangement I claim as new.

The machine may be operated by steam or water power. The saw O, may be run by a belt and pulley as usual. There is a pinion on the end of the shaft, n , which works into an adjustable rack on the carriage and the carriage is moved back and forth by means of this pinion and rack. The shaft n , may be run by a belt and pulleys or it may be turned by hand. I do not claim anything new in these respects.

The drawings may be considered as on a scale of one to six but the proportions should be varied according to circumstances and I believe that any ordinary mechanic skilled in the art can construct a machine with my improvements from the drawings and description which I have given.

I claim as my invention—

The stops K, K, in combination with the notches or teeth t , t , on the set wheels arranged and used for the purposes and substantially as herein set forth.

P. O. SHERWIN.

Witnesses:

I. H. CLARK,
ORREL GREEN.