

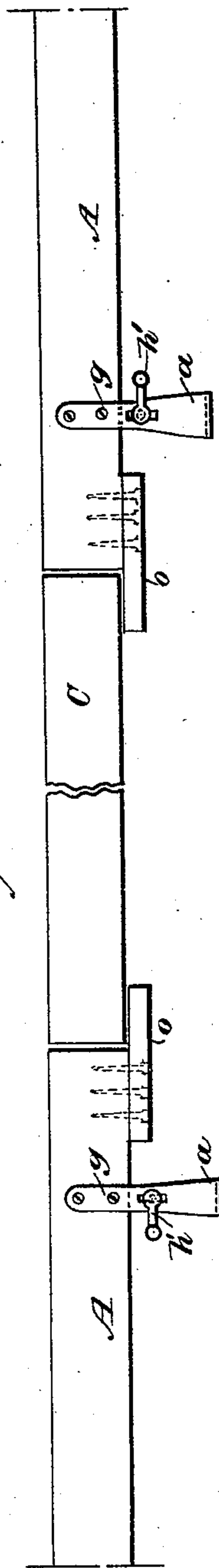
(No Model.)

C. AVERY.
SHINGLING GAGE.

No. 472,846.

Patented Apr. 12, 1892.

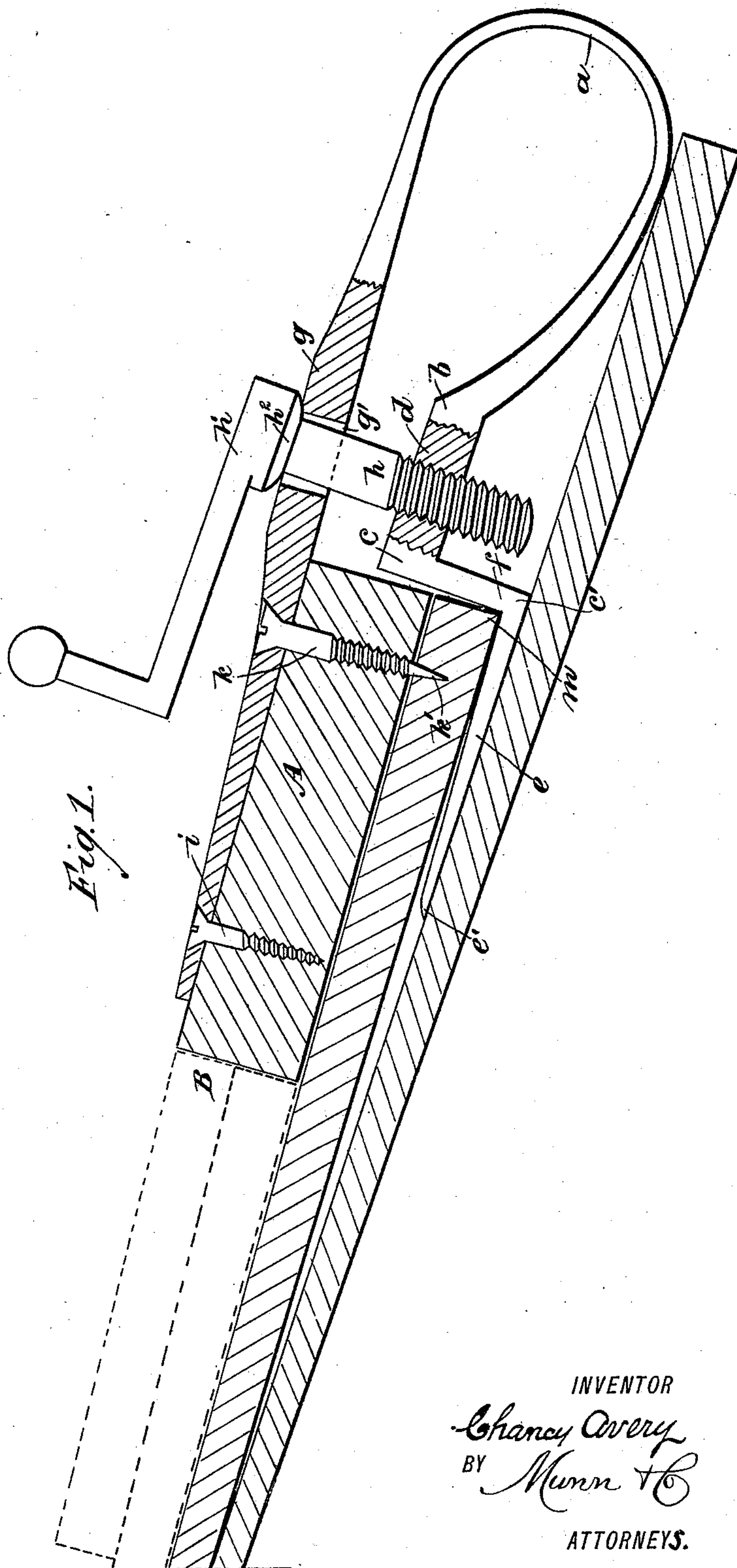
Fig. 2.



WITNESSES:

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Fig. 1.



INVENTOR

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UNITED STATES PATENT OFFICE.

CHANCY AVERY, OF PLEASANT LAKE, INDIANA.

SHINGLING-GAGE.

SPECIFICATION forming part of Letters Patent No. 472,846, dated April 12, 1892.

Application filed August 31, 1891. Serial No. 404,231. (No model.)

To all whom it may concern:

Be it known that I, CHANCY AVERY, of Pleasant Lake, in the county of Steuben and State of Indiana, have invented a new and useful Shingling-Gage, of which the following is a full, clear, and exact description.

The object of this invention is to provide a simple and inexpensive tool which in service will greatly expedite the work of affixing shingles to form a roof.

To this end my invention consists in the construction and combination of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both of the figures.

Figure 1 is a side view, partly in section, of the device in position for use and Fig. 2 is a reduced plan view of two of the gages secured upon the end portions of two straight-edges, shown broken, and an intermediate straight-edge, also shown broken, held in place by the other pieces that it loosely engages.

The main portion of the device consists of a single piece of metal, preferably steel. A bow-spring *a* is formed on this piece near its longitudinal center, which spring is curved flatwise and has sufficient resilience for its efficient service. The end portion of the spring *a* that in use will be lowermost is first bent at *b* and then at *c* and *c'*, thus producing two parts *d e*, that are in parallel planes and joined by a part *f*, that is at right angles to the portions *d e*. From the lower end of the portion *f*, where the part *e* is integrally joined to it, the latter is tapered on its upper side, so as to produce a wedge, the thin end *e'* of which is free for insertion in a crevice.

The other limb *g* of the bow-spring *a* is thickened where it lies opposite the thickened part *d* and is apertured at *g'*, said hole being longitudinally enlarged. At a point opposite the elongated hole *g'* the portion *d* is perforated and tapped to receive the screw-shank *h* that is preferably furnished with a crank-handle *h'*, the boss of said crank on the side *h²*, that comes into contact with the upper surface of limb *g* when the screw is in place having a convex form, which will facilitate the adjustment of the screw. From the screw-body *h* the upper limb *g* is preferably tapered toward

the end flatwise and is perforated at a proper distance apart in two places for the introduction of the wood-screws *i k*.

In service two of the devices just described are used, one being affixed to each end portion of a strip of wood or metal *A*, that is technically termed a "straight-edge," having its side edges parallel and the body of equal thickness throughout. The straight-edge *A* is shown in cross-section in Fig. 1 at the point of attachment of one of the gages, and, as indicated, is thereto secured with the screws *i k*, which first penetrate the limb portion *g* and then enter the body of the straight-edge, whereon said limb of the bow-spring is imposed.

The straight-edge *A* is made equal in breadth to the length of weather exposure to be given to the shingles and of a length convenient to handle, which may be five or six feet.

The screw *k*, which is inserted through the straight-edge *A*, near the edge which is adjacent to the corner *c* of limb portion *d*, is pointed on its terminal that extends from the lower surface of the straight-edge, so that the point *k'* may be driven into a shingle whereon the straight-edge is imposed, as shown in Fig. 1.

Shingle roofs are laid from the eaves upwardly. To put the device in service, the wedge portion *e* of each gage is inserted between two lapped shingles at their "butts" or thicker lower ends, as shown at *m* in Fig. 1, the upright parts *f* being made to impinge on the shingle-butts. After the wedge portions *e* are fully inserted, the screws *h* are manipulated by rotating their crank-handles *h'*, so as to compress the bow-springs *a*, and thus clamp the straight-edge *A* upon the row of shingle-butts, the screws *k* having their points *k'* driven into the shingles they are opposite. The roofer now applies a row of shingles upon the parts of the shingles exposed above the straight-edge *A*, nailing them in place, and successive rows may be laid and secured by changing the gages and locating their wedge portions *e* below and the straight-edge *A* upon the butt portions of the row last secured.

Should it be desired to affix two rows of shingles in succession before shifting the straight-edge *A*, this may be effected by plac-

ing a loose straight-edge B upon the row of shingles that have their butts in contact with the upper edge of the straight-edge A, as shown by dotted lines in Fig. 1, this imposed
 5 straight-edge being preferably made of half the thickness given to the piece A. The next row of shingles abut their lower ends on the upper edge of the loose piece B, which latter, being of equal width with the straight-edge
 10 A, serves to gage the weather-exposure of the secured row of shingles whereon it is laid.

When the roof to be shingled is of considerable length, there may be an intermediate gage-strip C provided, as shown in Fig. 2, the
 15 edges of which are held in alignment with the edges of the straight-edges A by cleats o, that are secured to the lower edge of each straight-edge A, so as to project from their ends and afford seats whereon the lower edge
 20 of the middle gage-strip or straight-edge C rests at each end, where the straight-edges A are clamped to the butts of a row of shingles, this arrangement of parts affording greater length to the gaging straight-edges and more
 25 room for roofers to work in a line.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A shingling-gage comprising a bow-spring, the limbs of which are extended in the same direction, one limb wedge-shaped flatwise and the other limb perforated to receive screws, which attach the gage to an elongated strip, said limbs oppositely apertured
 30 for a clamping-screw, and a clamping-screw for the limbs, substantially as described.

2. A shingling-gage comprising a bow-spring, one limb of which is perforated for screws, the other limb bent first at a right angle away from the perforated limb and then
 40 forwardly, the extended portion being wedge-shaped, both limbs being perforated to receive a clamping-screw, and a clamping-screw

loose in one limb and in threaded engagement with the other limb, substantially as described. 45

3. A shingling-gage formed of one piece of metal bent into a bow-spring near its longitudinal center to produce limbs that are perforated oppositely to receive a clamping-screw, which has threaded engagement with one limb and passes loosely through the other limb, which is perforated for screws, and two screws that enter a gage-strip and retain the gage device at a right angle thereto, substantially as described. 55

4. A shingling-gage formed of a flat piece of metal bent into a bow-spring, its limbs thus formed extending in the same direction, one limb bent outwardly from the other limb and then forwardly and wedge-shaped toward the end, having a threaded orifice near the bow-spring to receive a clamping-screw, the straight limb being provided with an elongated aperture, wherein the clamping-screw
 60 loosely slides, and also perforated nearer the end to admit screws that enter a gage-strip, substantially as described.

5. The combination, with an elongated gage-strip, of a clamping-gage comprising a bow-spring the lower limb of which is bent at a right angle away from the upper limb and is wedge-shaped flatwise and the upper limb perforated to admit two screws, one screw securing it to the gage-strip and the other screw
 70 pointed and projecting through the gage-strip, and a handled clamping-screw passing through the upper limb of the clamping-gage and engaging its threaded body with a tapped hole in the lower limb, substantially as described. 80

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Witnesses:

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