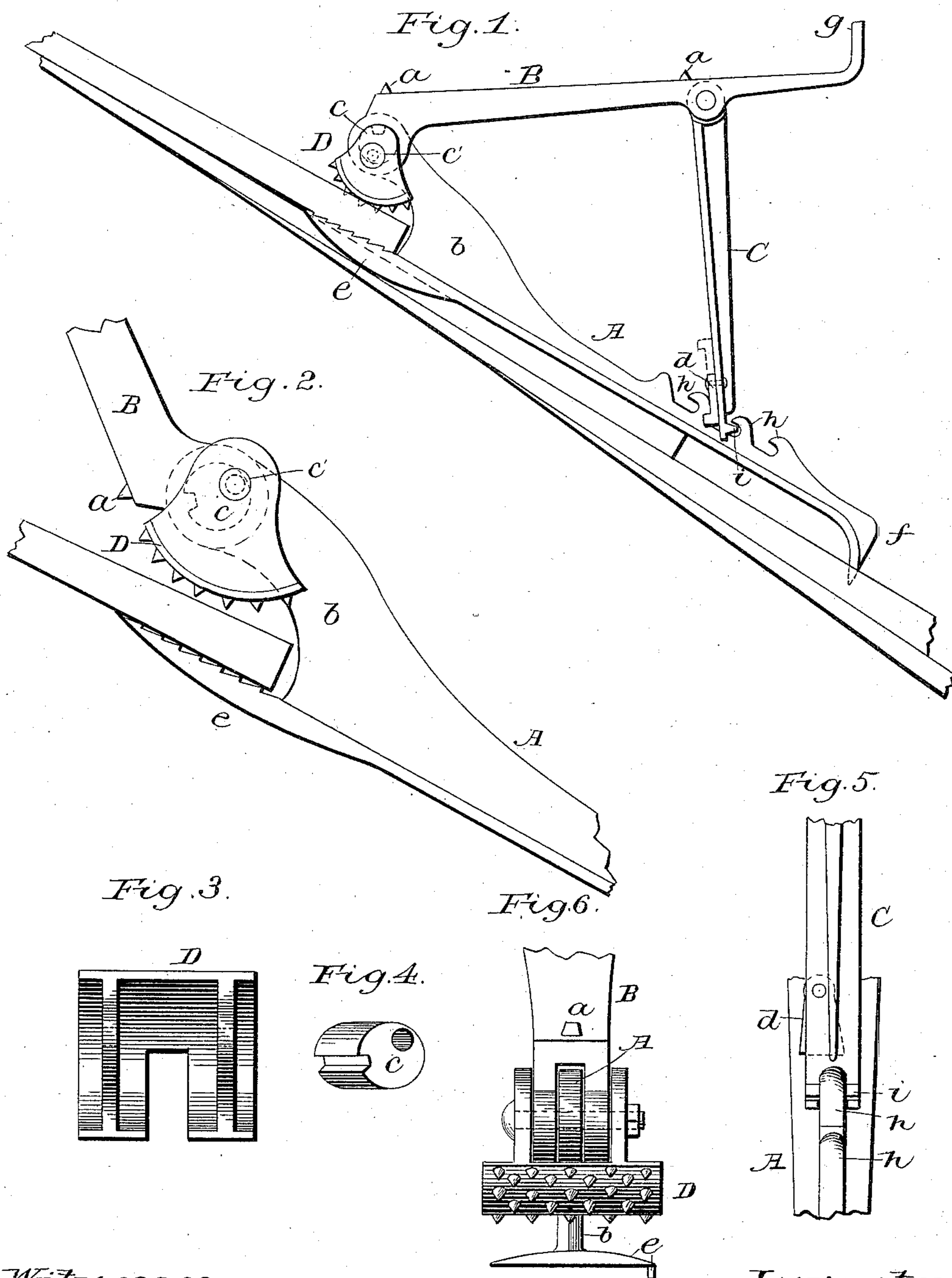


(No Model.)

E. R. ELMER.
SHINGLE OR ROOF BRACKET.

No. 330,971.

Patented Nov. 24, 1885.



Witnesses:

Geo. H. Scott

J. C. Smith

Inventor:

Edwin Romango Elmer

UNITED STATES PATENT OFFICE.

EDWIN ROMANZO ELMER, OF BUCKLAND, MASSACHUSETTS.

SHINGLE OR ROOF BRACKET.

SPECIFICATION forming part of Letters Patent No. 330,971, dated November 24, 1885.

Application filed August 10, 1885. Serial No. 174,053. (No model.)

To all whom it may concern:

Be it known that I, EDWIN ROMANZO ELMER, a citizen of the United States, residing at Buckland, in the county of Franklin and State of Massachusetts, have invented a new and useful Shingle or Roof Bracket, of which the following is a specification.

My invention relates to improvements in that class of roof-brackets that are secured to the roof by gripping the shingle.

The objects of my invention are to produce a bracket improved in the following qualifications: First, in the manner of adjusting to different thicknesses of shingle; second, in providing facilities for a constantly-accumulating pressure to the shingle proportional to the weight on the scaffolding, so that if put on with an insufficient grip the pressure by the weight on the scaffolding will tighten the grip, thus making it automatic and perfectly safe; third, for supplying means for securely fastening or locking the brace when adjusted to different pitches of roof. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the entire bracket adjusted to the roof. Fig. 2 is an enlarged side view of that part of the bracket comprised in claims 2 and 3, showing the bracket with the top piece or tread thrown forward, thus raising the rocking cam and presser-foot for receiving the shingle-butts. Fig. 3 is a plan view of the rocking cam and presser-foot. Fig. 4 is a perspective view of the eccentric pin *c*, by which the tread is hinged to the bottom piece, and is the mechanism for pressing the rocking cam and presser-foot *D* against the shingle. Fig. 5 is a view of the back of the parts covering claim 4, showing the manner in which the brace is fastened when adjusted. Fig. 6 is a front view of that part of the bracket covering claims 2 and 3.

Similar letters refer to similar parts throughout the several views.

The base or bottom piece, *A*, is provided with the jaw *e*, (creased in the form of a float, so as to the better adhere to the shingles,) the arm *b*, with a circular hole in the end for receiving the large pin *c*, as shown by the dotted lines in Fig. 2, the notches *h h h* for receiving the foot of the brace *C*, and the claw or heel-spur *f*. The front end of the top piece or

tread, *B*, is divided into two parts for receiving the arm *b* of the bottom piece, *A*, as shown in Fig. 6, and is hinged to the latter by means of the pin *c*. The aperture through tread *B*, through which projects the pin *c*, is the same shape as end of pin *c*, while the hole in the arm *b* is circular. Thus the pin *c* is keyed to tread *B*, but is free in arm *b* of the bottom piece, *A*. Therefore, when the tread *B* is raised or lowered, the pin *c* is stationary in tread *B*, but turns in arm *b* of the bottom piece, *A*. Near the periphery of the pin *c* is a hole, as shown in Fig. 4, for the reception of a smaller pin, *c'*, with which the rocking cam *D* is riveted to the main part of the bracket, as shown in Fig. 2. Now, it is evident that by throwing the upper part of the bracket forward it raises the rocking cam *D*, as shown in Fig. 2, for the reception of the shingle, and by turning this cam forward or backward it can be adjusted to different thicknesses of shingle. Then by bringing down the top of the bracket to the required position it lowers the rocking cam and presser-foot *D*, thus firmly pressing the shingle. It will also be seen that any additional weight on the bracket has a tendency to rock the cam *D*, thus making a stronger grip on the shingle.

On the top of the tread *B* are spurs *a a a*, to keep the scaffolding from slipping, and the back end of the tread is turned upward at *g*, to prevent the boards from sliding off.

The brace *C* is hinged to the tread *B*, as shown in the drawings. The foot of this brace is notched, so as to fit over the rib on the bottom piece, *A*, (which keeps the brace from slipping sidewise,) at *h h h*, as shown in Fig. 5, and has a horizontal ledge, *i*, which fits under the claws *h h h*. On the other side of the foot of the brace *C* is riveted a button, *d*, so that when the brace is down in position the button can be turned down between the claws *h h h* and the heel of the brace, thus locking the brace securely. It can be seen by placing the brace in the different notches *h h h* it changes the pitch of the bracket.

On the bottom of the rocking cam and presser-foot *D* are small spurs which prevent its slipping and take a firmer hold on the shingle.

To adjust the bracket to the roof, throw the top part of the bracket forward as far as it will go. (See Fig. 2.) Then, gripping the

tread B with the right hand and bearing with the thumb against the cam D, bring the top part down until the spurs on the under side of the cam press the shingle. Then remove
 5 the thumb and bring down the top part to its proper position and lock the foot of the brace with the button. Thus I have a bracket that is adjustable to different thicknesses of shingle and different pitches of roof, and by
 10 my device for fastening the brace in any of the pitches, together with the self-adjusting rocking cam and eccentric pin, make the bracket perfectly safe; besides, they can be constructed at less cost than most other brackets.

15 I am aware that prior to my invention roof-brackets have been made adjustable to different thicknesses of shingle and different pitches of roof; I therefore do not claim such as my invention, broadly, but confine my invention to
 20 the improvements as before stated, and to a combination combining all of the qualities herein used.

What I do claim, and desire to secure by Letters Patent, is—

25 1. The combination of a roof-bracket, as

herein described, consisting of the bottom piece, A, with jaw *e*, claws *h h h*, arm *b*, and heel-spur *f*, the tread B, with top spurs, *a a a*, and stop *g*, brace C, with ledge *i* and button *d*, the rocking cam and presser-foot D, and
 30 eccentric pin *e*, with smaller pin, *e'*, when used as and for the purpose specified.

2. In a roof-bracket, the rocking cam and presser-foot D, hung eccentrically, adapting the bracket for adjustment to different thick-
 35 nesses of shingle, as shown and described.

3. In a shingling-bracket, the combination, with the bottom piece, A, of the tread B, pivoted thereto by means of the pivot *e*, having
 40 eccentric pin *e'*, upon which is pivoted the presser-foot D, as herein shown and described.

4. In a shingle-bracket, the combination of the claws *h h h*, ledge *i*, and button *d*, for locking the brace in its different positions when
 45 adjusted to different pitches of roof, all substantially as set forth.

EDWIN ROMANZO ELMER.

Witnesses:

J. B. BARDWELL,
 O. R. MAYNARD.