

No. 677,645.

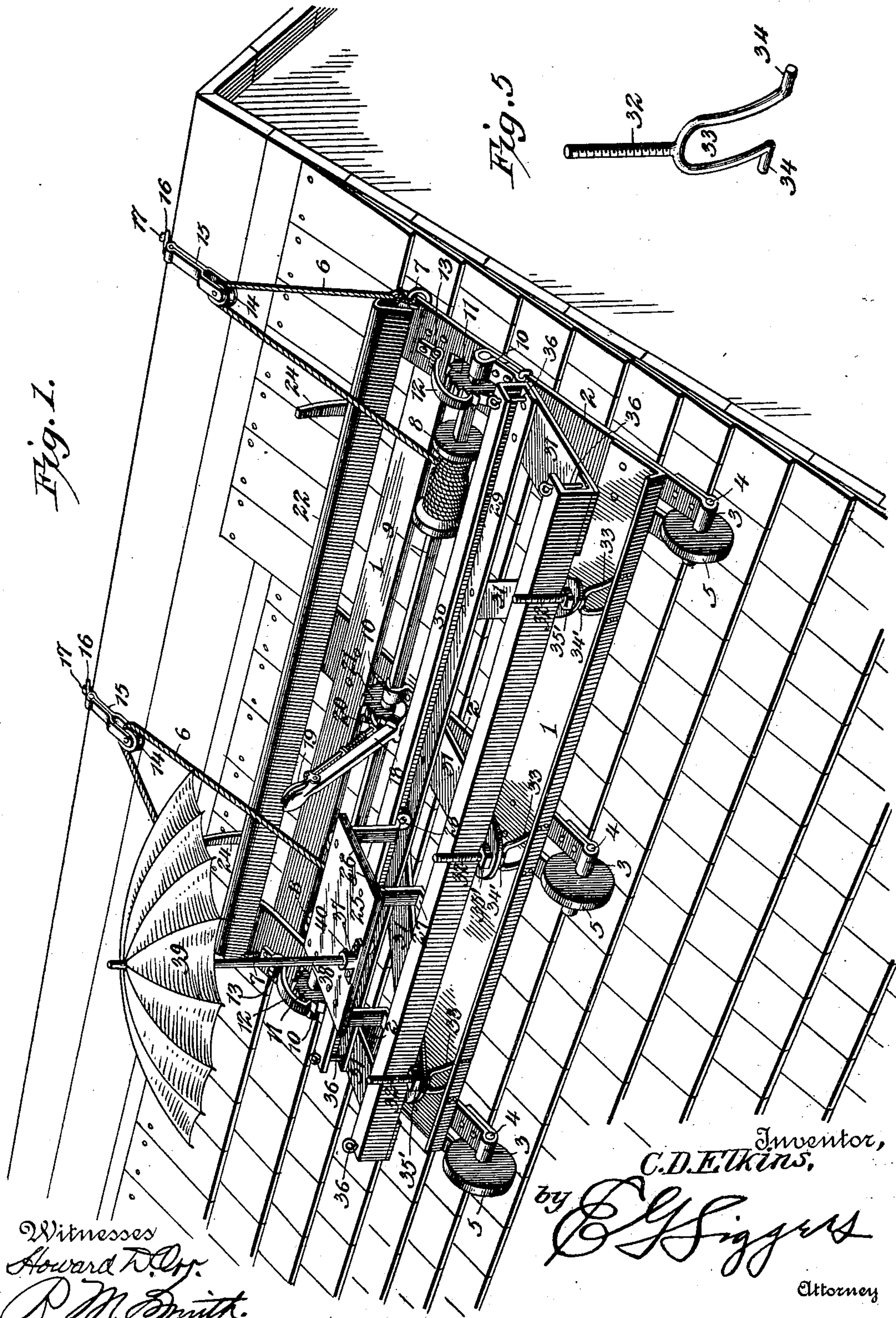
Patented July 2, 1901.

C. D. ELKINS.
SHINGLING BRACKET.

(Application filed Mar. 8, 1901.)

2 Sheets—Sheet 1.

(No Model.)



Witnesses
Howard W. Coy.
R. M. Smith.

Inventor,
C. D. Elkins,
by *E. J. Siggers*
Attorney

No. 677,645.

Patented July 2, 1901.

C. D. ELKINS.
SHINGLING BRACKET.
(Application filed Mar. 8, 1901.)

2 Sheets—Sheet 2.

(No Model.)

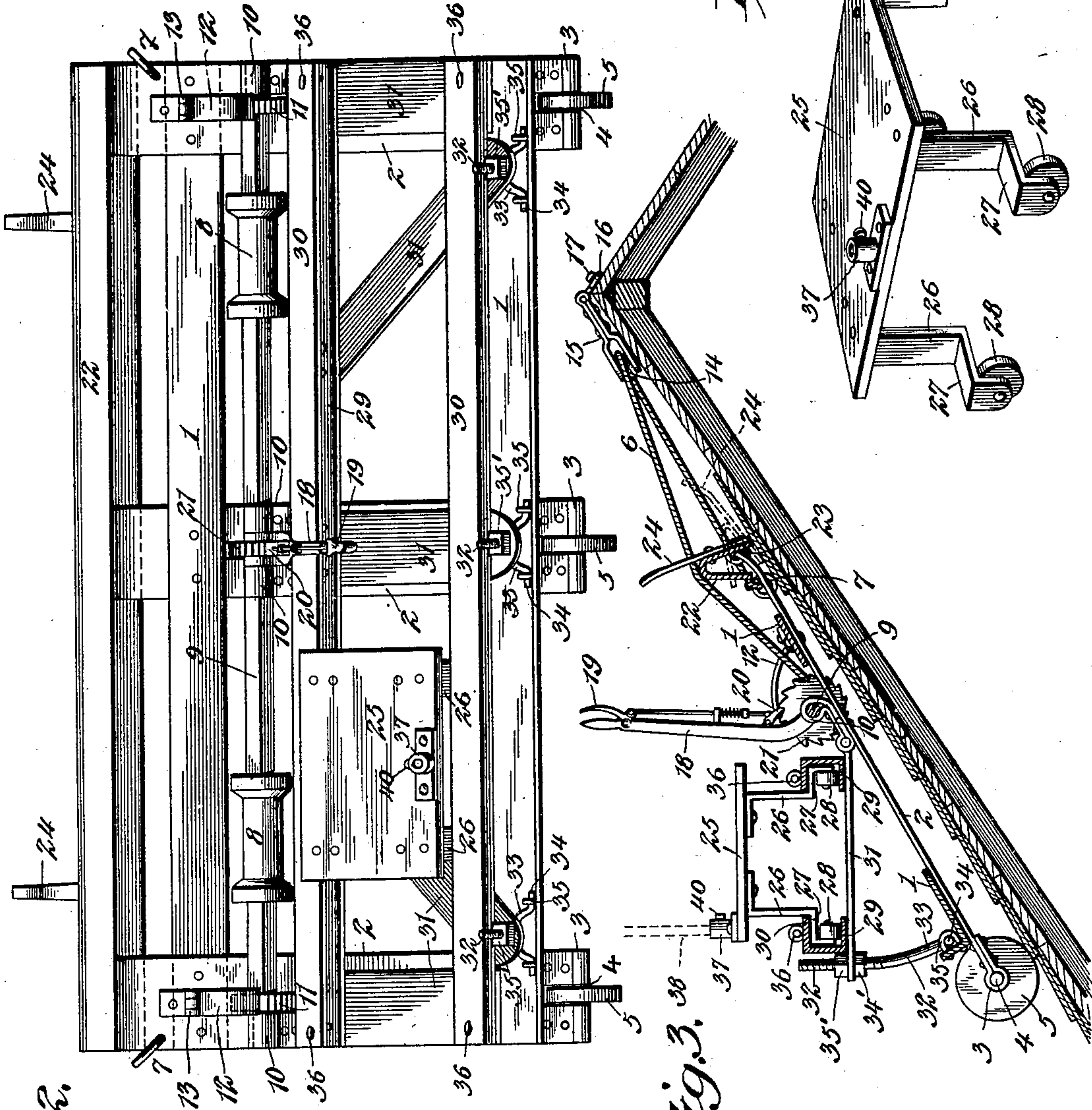


Fig. 3.

Fig. 4.

C. D. ELKINS, Inventor,

By

E. G. Siggers,

Attorney

Witnesses
Howard D. Orr.
R. N. Smith.

UNITED STATES PATENT OFFICE.

CHARLES DAVID ELKINS, OF PINE BLUFF, ARKANSAS.

SHINGLING-BRACKET.

SPECIFICATION forming part of Letters Patent No. 677,645, dated July 2, 1901.

Application filed March 8, 1901. Serial No. 50,377. (No model.)

To all whom it may concern:

Be it known that I, CHARLES DAVID ELKINS, a citizen of the United States, residing at Pine Bluff, in the county of Jefferson and State of Arkansas, have invented a new and useful Shingling-Bracket, of which the following is a specification.

This invention relates to shingling-brackets; and one object in view is to provide an adjustable bracket combined with means for raising and lowering the same, or, in other words, moving the bracket upward and downward, on an inclined roof for the purpose of affording an efficient support for a workman while applying the shingles to the roof and also a support for the shingles or bundles thereof. The means for raising and lowering the shingling-bracket comprises a plurality of cables which are arranged at or near the opposite ends of the bracket and capable of being simultaneously operated by a single operating device, preferably in the form of a thumb-latch lever connected to a common shaft, upon which the drums of the raising and lowering cables are mounted.

Another object of the invention is to provide a movable platform or carriage designed to form a seat for the workman and also to receive a portion of the shingles, and in connection with such carriage I employ a rail-bed comprising parallel rails upon which the supporting-rollers of the carriage move, the rail-bed having combined therewith means for raising and lowering the bed and bringing the rails thereof into the same horizontal plane, or approximately so.

A further object of the invention is to provide, in connection with the shingling-bracket, a combined gage and runner, which is applied to the upper edge of the bracket and adapted to be folded to one or the other of two positions, in one of which it forms a shingle-gage and in the other a runner which is adapted to bear on the shingles and assist in the upward or downward movement of the bracket as it is operated upon by the elevating and lowering devices.

With the above and other objects in view, the nature of which will appear more fully as the description proceeds, the invention consists in the novel construction, combination,

and arrangement of parts hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the shingling-bracket complete, showing the same mounted in position upon a roof and the combined gage and runner adjusted to a position in which it forms a shingle-gage. Fig. 2 is a plan view of the same, omitting the cables. Fig. 3 is a cross-section through the parts illustrated in Fig. 1. Fig. 4 is an enlarged detail perspective view of the traveling carriage or platform. Fig. 5 is a detail perspective view of one of the supporting-posts for the rail-bed.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

The shingling-bracket contemplated in this invention comprises, essentially, a base constituting the main frame of the bracket and composed of longitudinal bars 1, connected at intervals by cross-bars 2, the cross-bars extending at both ends beyond the longitudinal bars 1 and being provided at their lower ends with bearings 3, in which are journaled the spindles 4 of a series of supporting-wheels 5, the axes of which are disposed longitudinally of the shingling-bracket, so as to form rolling supports for the lower end of the bracket as the latter is raised or lowered by means of the cables.

The mechanism for raising and lowering the shingling-bracket comprises a plurality of cables 6, each of which is connected at one end to the shingling-bracket, as shown at 7, preferably at or near one end thereof, while the opposite end of each cable is wound upon a drum or windlass 8. The drums or windlasses 8 are mounted upon a common shaft 9, which is journaled in bearings 10 on the shingling-bracket and provided at or near its opposite ends with ratchet-wheels 11, fast on the shaft and adapted to be engaged by detents 12, pivotally mounted at 13 on the frame of the bracket, the said detents serving to prevent the inopportune turning of the shaft, which would result in releasing the cables or allowing them to unwind and lower the shingling-bracket.

At intermediate points in their length the cables 6 pass around the sheaves 14 of a plu-

rality of hangers 15, provided with hinged loops or hooks 16, adapted to extend over the reach of the roof and to embrace or connect with spikes or other suitable projections 17 on the reverse side of the roof being shingled. The shaft 9 has a single operating device, which is shown in the form of a lever 18, journaled on the shaft 9 and provided with a thumb-latch lever 19 for operating a pawl 20, which engages a ratchet-wheel 21, fast on the shaft 9 at a point about centrally of the latter. When the workman desires to raise or lower the shingling-bracket, he operates the lever 18, which has the effect of rotating the shaft 9, and by reason of the fact that the drums 8 are the same in size both of the raising and lowering cables 6 will be uniformly wound upon the drums or unwound therefrom and both ends of the shingling-bracket will have imparted thereto an equal movement in an upward or downward direction, as the case may be, thus preserving the parallel relation of the shingle-gage, hereinafter described, to the ridge of the roof and insuring the application of the shingles in lines parallel to each other and to the ridge.

Connected to the upper end of the frame of the shingling-bracket is a combined gage and runner 22, which is preferably of V shape in cross-section, as shown in Figs. 1 and 3, and hingedly connected at one edge, as shown at 23, to the upper extremities of the cross-bars 2 of the bracket-frame, whereby the said gage and runner is adapted to be turned upward into the position illustrated in Figs. 1 and 3 or downwardly, so as to occupy the position shown in Fig. 2. When turned upward, as shown, for example, in Fig. 1, the device forms a shingle-gage, which rests upon the last row of shingles and forms an abutting surface, against which the butts of the succeeding row of shingles may bear for gaging the position of the shingles in the manner illustrated in Fig. 1. After shingles have been laid the full length of the gage the latter is turned downwardly to the position illustrated in Fig. 2, which causes it to overlap the butts of the shingles and form a runner for the upper end of the bracket-arm, which greatly facilitates the further upward movement and adjustment of the shingle-bracket. The combined gage and runner is also provided with outwardly-extending shoes 24, which serve as guides for the runner as the latter moves upward, said shoes also forming lever extensions by means of which the gage and runner may be thrown upward or downward to either of its operative positions.

In connection with the shingling-bracket I employ a traveling carriage, forming a support for the workman and a quantity of shingles. This carriage is adapted to move lengthwise of the shingling-bracket and comprises, essentially, a platform 25, having connected thereto the corner-supporting standards 26, the lower ends of which are offset and extended laterally outward in opposite direc-

tions, as shown at 27, and extended thence downwardly, where they are provided with journals to receive a series of rollers 28, which run upon parallel rails 29 in the form of channel-bars, said bars comprising, in addition to the rail portions 29, guard-flanges 30, which overhang the rollers 28 and extend above the offsets 27, above described, so as to prevent any possibility of the carriage escaping from the rails. The rails are supported upon what may be termed a "rail-bed," which consists of a series of cross-bars 31, some of which are disposed at right angles to the rails and others diagonally thereof. The rails are securely united to the cross-bars which form the rail-bed in any suitable manner, and several of said cross-bars are extended beyond the outer rail and formed with openings for the reception of the threaded upper portions of a series of track-supporting posts 32, each of which is provided with a bifurcated foot 33, having the oppositely-projecting journals 34, which are mounted in bearings 35, connected to the lower longitudinal frame-bar 1 of the shingling-bracket, as illustrated in Figs. 2 and 3. Each of the supporting-posts 32 is provided with an adjusting-nut 34', which underlies the rail-bed, and a second jam-nut 35', which is adapted to bear against the upper side of the rail-bed, so as to securely hold said bed in its adjusted position. By the means just hereinabove described the rail-bed may be leveled and the track-rails brought into the same horizontal plane, or approximately so, irrespective of the pitch of the roof and the inclination of the main or base frame of the shingling-bracket. Each of the rails is provided at its opposite ends with stops 36, preferably in the form of pins inserted through vertically-registering openings in the rails 29 and overhanging guard-flanges 30, as best illustrated in Fig. 1. Said stop-pins act upon the platform-standards of the traveling carriage and prevent the carriage from being accidentally moved out of engagement with the ends of the rails. It will be understood that the workman pushes the carriage or platform lengthwise of the shingling-bracket by placing his feet against the roof, no special operating mechanism being required for that purpose. In order to protect the workman in very cold or rainy weather, the platform is provided with a socket 37, adapted to receive at the lower end of the staff 38 a canopy 39, of any suitable construction. The socket 37 is preferably provided with a binding-screw 40 for securely holding the staff of the canopy when high winds prevail.

From the foregoing description it will be seen that I have provided a simple and efficient shingling-bracket in connection with mechanism for raising and lowering the bracket uniformly at both ends, the raising and lowering action being effected at one point by means of a single operating device, which is preferably in the form of a hand-lever; further, that I have provided a hinged rail-

bed upon which a traveling carriage is mounted and provided simple and efficient means for leveling the rail-bed and bringing the rails into the same horizontal plane, or substantially so, irrespective of the pitch of the roof and the angle of the base-frame of the bracket. It will also be seen that I have provided a novel form of combined gage and runner, constituting in one position a shingle-gage and in its other position a runner for facilitating the upward and downward adjustment or movement of the shingling-bracket as a whole.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim is—

1. The combination with a shingling-bracket, of a combined shingle-gage and runner extending along the upper edge thereof and adapted to move in contact with the roof, and means for moving the bracket up and down on the roof.

2. The combination with a shingling-bracket, of a combined shingling-gage and runner extending along the upper edge of the bracket and adapted to move in contact with the roof, supporting-wheels in rear of the bracket, and means for moving the shingling-bracket up and down on the roof.

3. The combination with a shingling-bracket, of a combined shingle-gage and runner extending along the upper edge thereof and adapted to move in contact with the roof.

4. The combination with a shingling-bracket, of a combined shingle-gage and runner hinged to the upper edge thereof and adapted to move in contact with the roof.

5. The combination with a shingling-bracket, of a combined shingle-gage and runner extending along the upper edge thereof, said gage being adjustable to different positions in one of which it constitutes a shingle-gage and in the other a runner.

6. The combination with a shingling-bracket, of a combined shingle-gage and runner extending along and hinged to the upper edge of the bracket, said gage and runner being V-shaped in cross-section.

7. The combination with a shingling-bracket, of a combined shingle-gage and runner

hinged to the upper edge thereof and provided with projecting shoes.

8. The combination with a shingling-bracket, and raising and lowering means therefor, of supporting-wheels at the rear of the bracket, and a combined shingle-gage and runner at the front of the bracket.

9. The combination with a shingling-bracket, and raising and lowering means therefor, of a rail-bed, parallel track-rails extending lengthwise of the bracket, a traveling carriage thereon, and means for leveling the rail-bed.

10. The combination with a shingling-bracket, of a rail-bed hinged thereto, parallel track-rails extending lengthwise of the bracket, a traveling carriage thereon, and means for raising and lowering the outer portion of the rail-bed.

11. The combination with a shingling-bracket, of a rail-bed hinged thereto, a traveling carriage mounted thereon, rail-bed-supporting posts, and means connected with said posts for raising and lowering the rail-bed.

12. The combination with a shingling-bracket, of a rail-bed hinged thereto, a track thereon, a traveling carriage, track-supporting posts, and means for adjusting the rail-bed up and down on said posts.

13. The combination with a shingling-bracket, and a rail-bed hinged thereto, of a track on said bed, a traveling carriage, track-supporting posts hinged to the bracket-frame, and means for adjusting the rail-bed up and down upon said posts.

14. The combination with a shingling-bracket, of a rail-bed hinged thereto, a track thereon, a traveling carriage, supporting-posts having bifurcated lower ends hinged to the shingling-frame, and means for adjusting the rail-bed up and down on said posts.

15. The combination with a shingling-bracket, of a rail-bed, track-rails mounted thereon and provided with overhanging guard-flanges, a carriage supported by said rails and having its wheels housed in the overhanging guard-flanges, and stops at the ends of the rail for limiting the movement of the carriage in opposite directions.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES DAVID ELKINS.

Witnesses:

I. H. DINE,

JOHN E. ELKINS.