No. 710,281. Patented Sept. 30, 1902.

F. C. LEEK.

SHINGLING CARRIAGE AND GAGE.

(Application filed Feb. 26, 1902.)

(No Model.) 2 Sheets—Sheet 1.

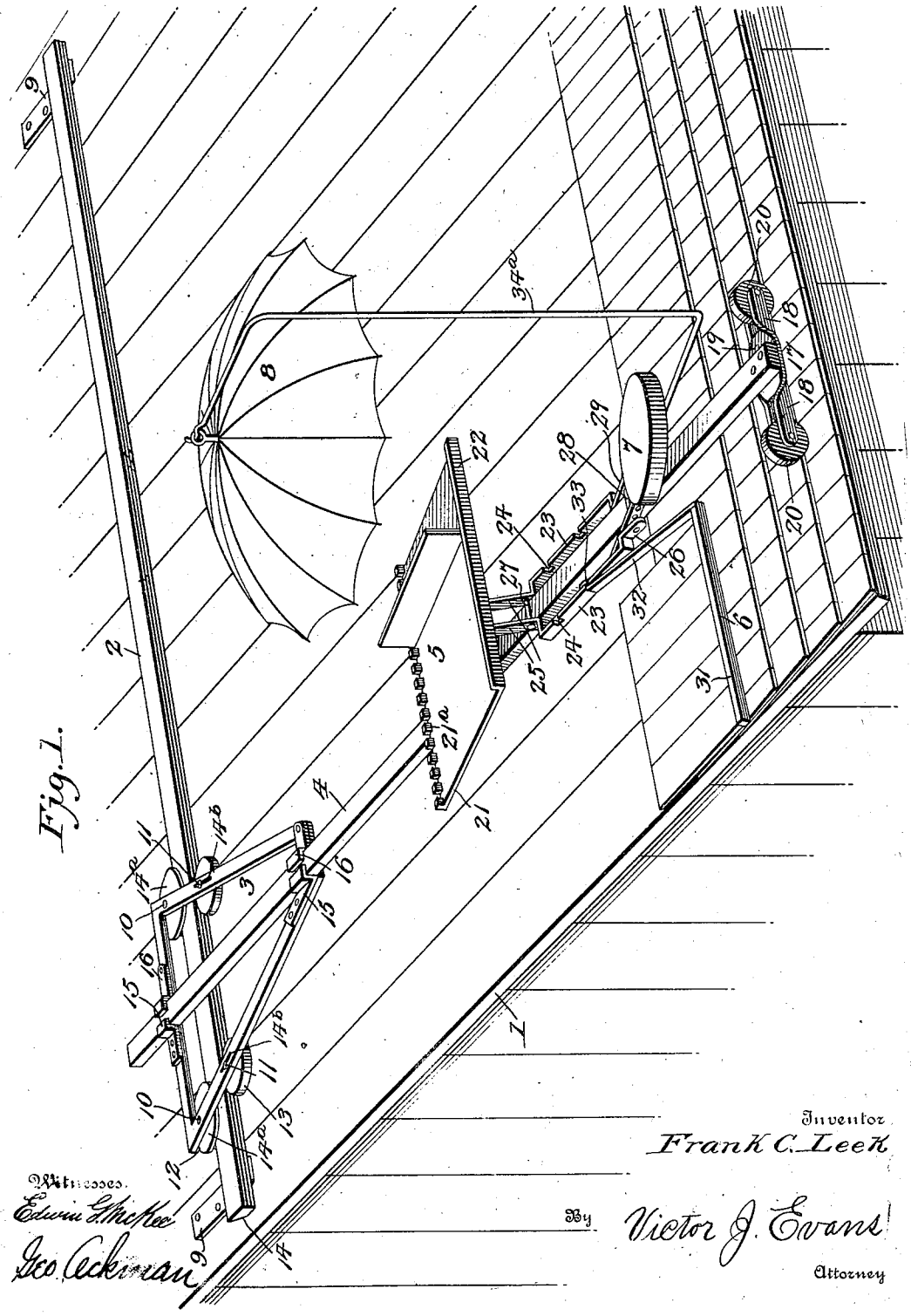


Fig. 1.

Witnesses.
Edwin L. McKee
Geo. Eckman

Inventor
Frank C. Leek
By Victor J. Evans
Attorney

No. 710,281. Patented Sept. 30, 1902.

F. C. LEEK.

SHINGLING CARRIAGE AND GAGE.

(Application filed Feb. 26, 1902.)

(No Model.) 2 Sheets—Sheet 2.

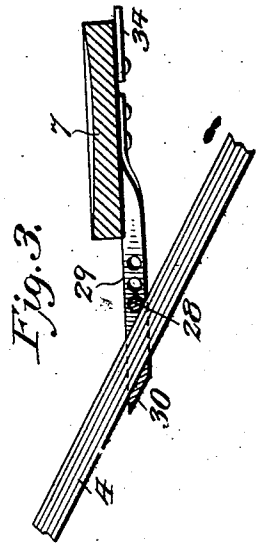


Fig. 3.

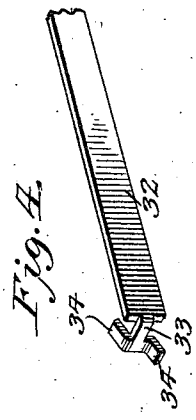


Fig. 4.

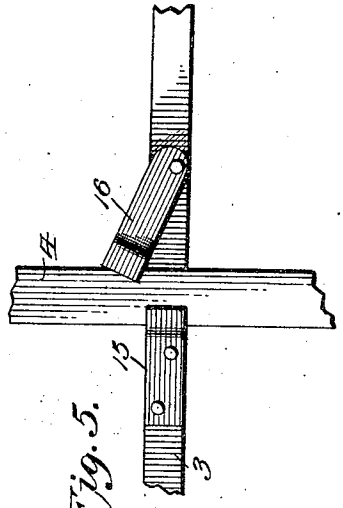


Fig. 5.

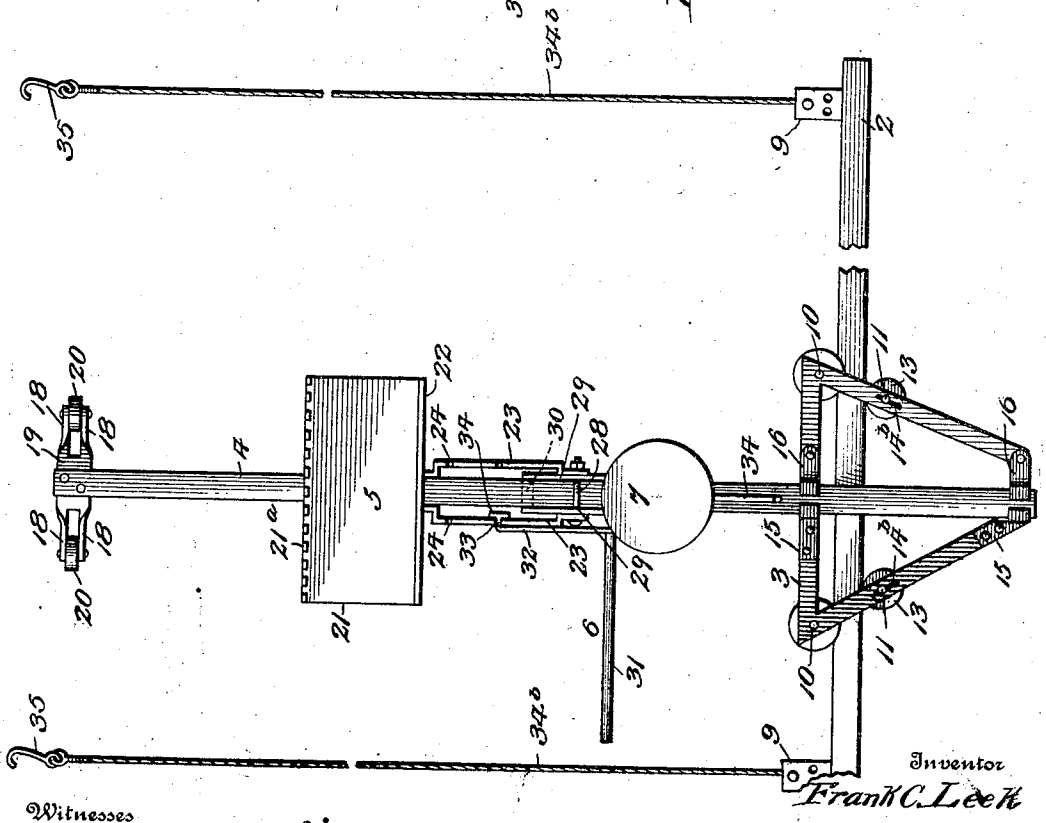


Fig. 2.

Witnesses
Edwin L. McKee
Geo. Ackerman.

Inventor
Frank C. Leek

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

FRANK C. LEEK, OF SURREY, INDIANA.

SHINGLING CARRIAGE AND GAGE.

SPECIFICATION forming part of Letters Patent No. 710,281, dated September 30, 1902.

Application filed February 26, 1902. Serial No. 95,721. (No model.)

To all whom it may concern:

Be it known that I, FRANK C. LEEK, a citizen of the United States, residing at Surrey, in the county of Jasper and State of Indiana, have invented certain new and useful Improvements in Shingling Carriages and Gages, of which the following is a specification.

This invention relates to shingling carriages and gages, having for its object the production of a device of this character which will greatly facilitate the shingling of roofs by overcoming several obstacles well known to the art and to permit the shingler to lay one row of shingles without leaving his seat.

A further object of the invention is to provide an improved carriage having an arm adjustably mounted thereon and upon which are adjustably mounted a shingle-carrier, gage, and seat, whereby the operator may, through the medium of the above-mentioned adjustable features, lay row after row of shingles until he reaches the rail supporting the entire device without the necessity of moving the rail.

A still further object of the invention is to provide a shingling-bracket capable of being used by painters by making a slight alteration in the means for securing the rail to the roof and by reversing the several parts without departing from the spirit of the invention.

The invention consists of the novel construction, arrangement, and combination of parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a perspective view of a shingling bracket and gage attached to a roof and constructed in accordance with my invention. Fig. 2 is a slight modification thereof, adapting the same to be used by painters. Fig. 3 is a detail sectional view illustrating the manner of clamping the supporting-bracket to the arm 4. Fig. 4 is a detail perspective view of the gage-arm. Fig. 5 is a detail view of the arm-clamping devices.

1 designates the roof of a building having attached thereto a rail 2, upon which is mounted a carriage 3, carrying an adjustably-mounted arm 4, upon which are adjustably secured a shingle-bracket 5, a gage 6, and a seat 7, over which is supported an umbrella 8 to protect the operator from the elements.

The rail 2 is provided at each end with suitable cleats 9, adapted to be secured to the roof to hold the rail in applied position, and mounted upon the rail is the carriage 3, approximately triangular in form and having depending from its under side pintles 10 and 11, upon which are journaled rollers 12 and 13. The rollers 12 are conical in shape to correspond with and to ride back and forth upon the inclined edge 14 of the rail 2 and are provided with guards 14^a upon their upper edges, which may be formed integral therewith or formed separately and secured thereto. The pintles 11, carrying the rollers 13, are adjustably mounted in elongated slots 14^b, whereby the rollers 13 may be moved toward and from the rail 2 to compensate for the wear of the latter.

The arm 4 is adjustably mounted upon the carriage 3 through the medium of rigid jaws 15 and pivoted jaws 16, and the lower end thereof is supported by a truck 17, comprising two parallel-arranged arms 18, connected by a horizontally-disposed platform 19, to which is rigidly secured the end of the arm 4, and journaled in suitable bearings in the arms 18 are shafts upon which are mounted rollers 20. The jaws 15 and 16 each have one of their ends upwardly and outwardly shaped, forming rectangular openings for the reception of the arm 4 and are so situated upon the carriage 3 that the arm 4 will be in the center thereof, whereby the weight of the shingler and shingles is equally distributed upon the rollers 12 and 13. The jaws 16 are fulcrumed upon the carriage 3 to permit the same to be freely moved away from the arm 4 to allow the latter to be adjusted thereon to move the seat 7 toward the carriage and to bind upon the arm 4 when the shingler is seated, which causes the arm 4 to have a tendency to move away from the carriage.

It will be perceived that the arm 4 may be readily moved toward and from the carriage and held in its adjusted position without liability of an accidental movement thereof.

The shingle-bracket 5 comprises a base-plate 21, provided upon its upper surface with a plurality of upwardly-projecting lugs 21^a, forming spaces for the reception of the small ends of the shingles, and near the other

edge thereof with an upwardly-projecting flange 22, against which abut the large ends of the shingles.

The seat 7 and shingle-bracket 5 are adjustably mounted upon the arm 4 by means of a supporting-bracket comprising parallel side bars 23, provided with a plurality of slots 24, the purpose of which will be fully explained hereinafter, having their ends inwardly bent to place arms 25 and 26 a suitable distance apart to embrace the edges of the arm 4. The arms 25 are upwardly bent and have secured to their free ends the bracket 5 and are connected by a bolt 27, resting upon the upper side of the arm 4 to support in a horizontal plane the bracket 5. The arms 26 carry near their forward ends a bolt 28, securing them together, and upon which is fulcrumed the seat 7.

The seat 7 may be of any size and form found advantageous and is adjustably secured upon a U-shaped bracket 29, having secured to its free ends the seat 7. The arms of the bracket are provided with a plurality of alining perforations to adjustably fulcrum the bracket upon the bolt 28 to compensate for the different angles of inclination of roofs to place the seat 7 in a horizontal plane and also placing the connecting-bar 30 upon the under side of the arm 4.

It will be perceived that the bracket carrying the shingle-bracket 5 and seat 7 is supported upon the arm 4 by the bolts 27 and 28 and that the shingler's weight upon the seat 7 will bring the bar 30 in contact with the under side of the arm 4 and that the arm 30 and bolt 28 will bind upon the arm 4, securely holding the bracket thereon. To move the seat and shingle-bracket upon the arm, the seat is tilted upon its fulcrum, withdrawing the arm 30 from contact with the arm 4, whereby the shingle-bracket and seat are free to be moved.

The gage 6 comprises an arm 31 of a length sufficient to support in position to be tacked to the roof a plurality of shingles and has extending at an angle thereto an arm 32, having its free end provided with a shank 33, having oppositely-disposed flanges 34. The gage is adapted to be secured to one of the side bars 23 by inserting the shank 33 in one of the slots thereof, and the same may be adjusted thereon through the medium of the said slots.

It is obvious that the gage obviates the necessity of the use of chalk-lines, as the same may be adjusted upon the side bars 23 to hold a plurality of shingles in proper position to be secured to the roof.

The umbrella 8 is supported above the seat 7 by a staff 34^a, secured at one end to the under side of the seat, and the umbrella is detachably secured thereto.

In nearing the completion of the shingling I have found that the supporting-bracket carrying the shingle-bracket and seat cannot be moved upward upon the arm 4 any farther than the lower end of the carriage, thus leaving a space upon the roof unshingled, and in order to obviate the same I suspend the rail from the highest point of the roof by cables 34^b, secured to the cleats 9 and having at their free ends hooks 35 to engage the highest point of the roof and reverse the position of the arm upon the carriage to place the seat and shingle-bracket in proper position thereon.

It will be perceived from the above description, taken in connection with the accompanying drawings, that I provide a device which will accomplish the desired result and which is cheap, durable, and efficient.

Having thus fully described the invention, what is claimed as new is—

1. The combination with a rail, of a carriage mounted thereon, an arm adjustably secured to the carriage, a supporting-bracket adjustably secured to the arm and carrying a shingle-bracket and a seat, and a gage.

2. The combination with a rail, of a carriage mounted thereon, pivoted and rigid jaws upon the carriage, an arm adjustably secured to the carriage through the medium of the jaws, a supporting-bracket adjustably mounted upon the arm and carrying a shingle-bracket and a seat, and a gage adjustably secured to the bracket.

3. The combination with a rail, of a carriage mounted thereon, an arm adjustably mounted upon the carriage, a supporting-bracket carrying upon one end a shingle-bracket, and on the opposite end a bolt, a U-shaped bracket fulcrumed upon the bolt placing the connecting-bar thereof upon the under side of the arm, a seat carried by the free ends of the last-mentioned bracket, causing the bolt and connecting-bar to bind the arm adjustably securing the seat and shingle-bracket thereon, and a gage adjustably secured upon the carrying-bracket.

4. The combination with a rail, of a carriage mounted thereon, rigid and pivoted jaws on the carriage, an arm adjustably mounted upon the carriage through the medium of the jaws, a truck secured to the lower end of the arm, a supporting-bracket provided with a plurality of slots, and a gage having a shank with oppositely-disposed flanges and adapted to fit in one of said slots.

5. The combination with a rail having one edge thereof inclined and means for securing the rail in applied position, of a carriage having depending from the under side thereof pintles, rollers journaled upon the pintles, some of which are conical in form and provided with guards, of an arm adjustably secured to the carriage, and a supporting-bracket adjustably secured to the arm and carrying a shingle-bracket and a seat.

6. The combination with an arm, of a supporting-bracket carrying a shingle-bracket

and seat, and adjustably secured to the arm, and a gage adjustably secured to the supporting-bracket and movable therewith.

7. In a shingling device, the combination of a supporting-rail having a beveled edge, and a carriage for adjustably holding parts of the device provided with depending rollers, a part of the latter being beveled correspondingly to the rail edge and having guards.

8. In a shingling device, the combination with an adjustable arm, of a bracket and seat adjustably mounted in the arm, and an angle-gage adjustably mounted in the bracket.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK C. LEEK.

Witnesses:
MOSES LEOPOLD,
JUDSON J. HUNT.