R. C. REDPATH.

LUMBER GAGE ATTACHMENT FOR SAWMILLS.

(Application filed June 6, 1901.)

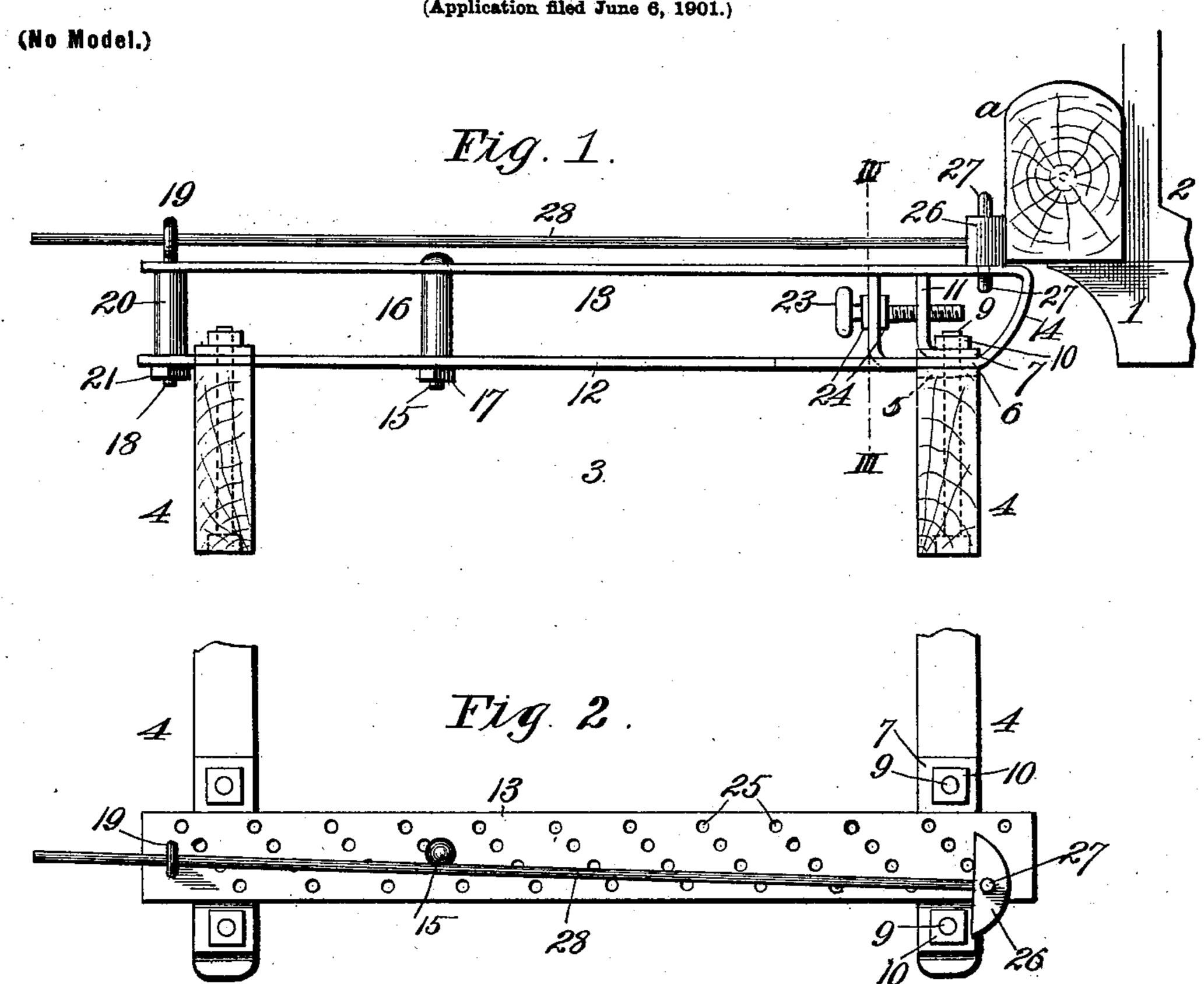
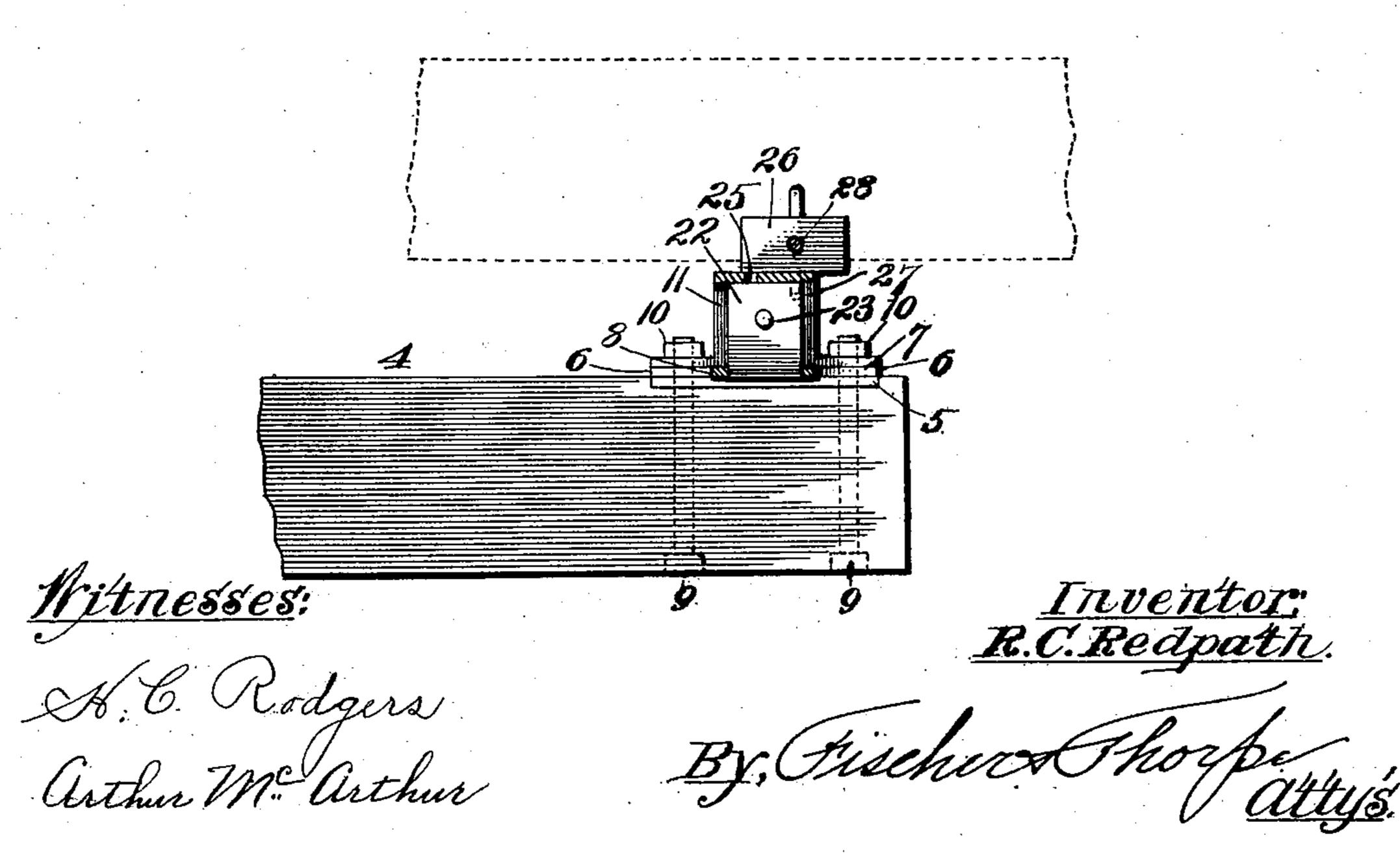


Fig. 3.



United States Patent Office.

ROBERT C. REDPATH, OF MORSE, KANSAS.

LUMBER-GAGE ATTACHMENT FOR SAWMILLS.

SPECIFICATION forming part of Letters Patent No. 688,334, dated December 10, 1901.

Application filed June 6, 1901. Serial No. 63,354. (No model.)

To all whom it may concern:

Be it known that I, ROBERT C. REDPATH, a citizen of the United States, residing at Morse, in the county of Johnson and State of Kansas, have invented certain new and useful Improvements in Lumber-Gage Attachments for Sawmills, of which the following is a specification.

My invention relates to lumber-gage atto tachments for sawmills; and my object is to
produce a simple, durable, and cheap device
to be used as a substitute for the gage-pins
on the carriage whereby the adjustment of
the log can be accurately regulated.

tain novel and peculiar features of construction and combinations of parts, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 represents a front view of a saw-mill-husk as provided with a lumber-gage attachment embodying my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a section on line III III of Fig. 1.

Referring now to the drawings, 1 designates the base, 2 the knee of a sawmill-carriage of the usual or any preferred type, and a log of wood supported upon the base and adjustable under the motion imparted to the knees by the usual ratchet or other mechanism.

3 designates the machine-husk, the longitudinal timbers 4 thereof being surmounted by the usual appurtenances, including the saw. (Not shown.) Upon the front end of the husk is my improved lumber-gage attachment, constructed as follows:

5 designates a wear-plate occupying a re40 cess in the upper edge and near the front end
of the timber adjacent to the carriage. 6 designates spacing-blocks upon the ends of the
same. 7 is a plate resting upon and bridging
the space between said blocks, so as to form
45 the guide-passage 8, said plates and blocks
being secured reliably together by means of
bolts 9, extending through timber 4 and engaged at their upper ends by clamping-nuts
10, and plate 7 is provided centrally with an
50 upturned arm 11, for a purpose which hereinafter appears.

Asliding frame in the form of a skeleton sled-

runner comprises runner 12 and a top 13, preferably integrally united together at their front ends, as at 14, and connected at an interme- 55 diate point by a bolt 15, a sleeve-washer 16 fitting upon the bolt to prevent said arms being bent out of shape by a nut 17 when screwed tightly upon the projecting end of the bolt. At their rear ends the arms are also connected 60 by a bolt 18, terminating in an eye or guide 19 at its upper end, and upon this bolt are also mounted a sleeve 20 and a clamping-nut 21. To effect a longitudinal adjustment of this sliding frame, a tongue 22 is stamped out of 65 runner 12 and caused to assume a vertical and upwardly-projecting position, and journaled in said tongue is a hand-screw 23, provided with collars 24 to prevent longitudinal movement in said tongue, the threaded por- 70 tion of the screw being mounted in the rigid upwardly-projecting arm 11 of plate 7, hereinbefore described. The arrangement is such that the movement of the hand-screw in one direction or the other causes the frame to ad- 75 vance or recede through the guide-opening 8, a similar guide-opening being provided near the opposite end of the frame. The top of said frame is provided with a plurality of equidistant holes arranged in oblique paral- 80 lel series, as at 25, the arrangement being such that the distance measured longitudinally between contiguous holes of one series is equal to the distance measured longitudinally between the rearmost hole of one series 85 and the foremost of that just behind.

A movable indicator comprises a segmental head 26, provided with a vertical pin 27 to engage one of the holes 25 and is also provided with a longitudinal stem 28, extending 90 slidingly through the eye or guide of bolt 18. Said head 26 is preferably segmental, in order that a plank just sawed from the log may bear with less friction thereon, and therefore be more easily removed.

The husk as equipped with this gage attachment is arranged with relation to the carriage in the usual manner, with pin 27 engaging the hole 25 desired and the rounded portion of the segmental head in contact with 100 the log to hold the latter at the desired point in order that a plank may be cut the required thickness, the thickness, of course, being increased as the pin is moved or caused to en-

gage holes more remote from the front end of the sliding frame. As arranged the adjustment is one-fourth of an inch between the holes; but it is obvious that the distance be-5 tween said holes or the particular number employed does not affect the merits of the invention. Should the refiling of the saw or the resetting of its teeth vary the line of cut, the variation can be compensated for by suit-10 able manipulation of screw 23, this adjustment moving the log or permitting it to be moved the required distance, so that the planks sawed therefrom shall be of precisely the same thickness as those cut before the 15 filing or resetting operation took place. In other words, by means of the screw adjustment in any desired degree can be attained, said screw coöperating with the saw-guide of the usual type. (Not shown.) The adjustment 20 of the indicator permits of a known increase or decrease in the thickness of the plank and works in conjunction particularly with the mechanism for moving the log.

parent that I have produced a lumber-gage attachment for sawmills which embodies the features of advantage enumerated as desirable in the statement of invention, and while the drawings illustrate and the specification describes the preferred embodiment of the invention it is to be understood that I reserve the right to make changes which properly fall within its spirit and scope.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a sawmill, of a lumber-gage attachment, comprising a bar mounted on the husk, and provided with a plurality of perforations arranged in diagonally-extending series, a guide 19 projecting upwardly from said bar at a suitable point, and an indicator, embracing a head, a pin depending therefrom for engaging one of the perforations, and a stem 28 extending loosely through guide 19, substantially as described.

2. The combination with a sawmill, of a lumber-gage attachment, comprising a frame ex-

tending transversely of and mounted on the husk and provided with a plurality of perforations arranged in diagonally-extending series, and a tongue, a plate secured to the husk and provided with an upwardly-projecting arm, a screw journaled or swiveled in the tongue and engaging said arm to advance or 55 withdraw the frame, a guide 19 projecting upwardly from the frame at its rear end, and an indicator consisting of a head having a depending pin engaging one of the perforations, and a stem 28 extending loosely through said 60 guide, all arranged and cooperating together substantially as described.

3. The combination with a sawmill, of a suitable guide mounted on the husk, a sliding frame extending transversely of and upon 65 the husk and through said guide, and consisting of a runner and a perforated top portion, a guide attached to and projecting above the top portion, and an indicator, comprising a head resting upon the top portion and provided with a pin engaging one of the holes of the latter, and a stem engaging said upwardly-projecting guide, substantially as described.

4. The combination of a sawmill, a guide secured thereto, comprising a pair of plates, 75 blocks interposed between the ends of said plates, bolts securing said plates and blocks to the husk, an arm projecting upwardly from the top plate, a sliding frame mounted on the husk transversely, and comprising a runner 80 extending through said guide and the perforated top, and provided with an upwardlyprojecting guide, a tongue projecting upwardly from the runner, a screw journaled therein and engaging the arm of said plate, 85 and an adjustable indicator resting upon the top, comprising a head, a pin depending therefrom to engage one of the perforations of the hole, and a stem engaging the guide of the latter, substantially as described.

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

ROBERT C. REDPATH.

Witnesses:

H. C. Rodgers, G. Y. Thorpe.