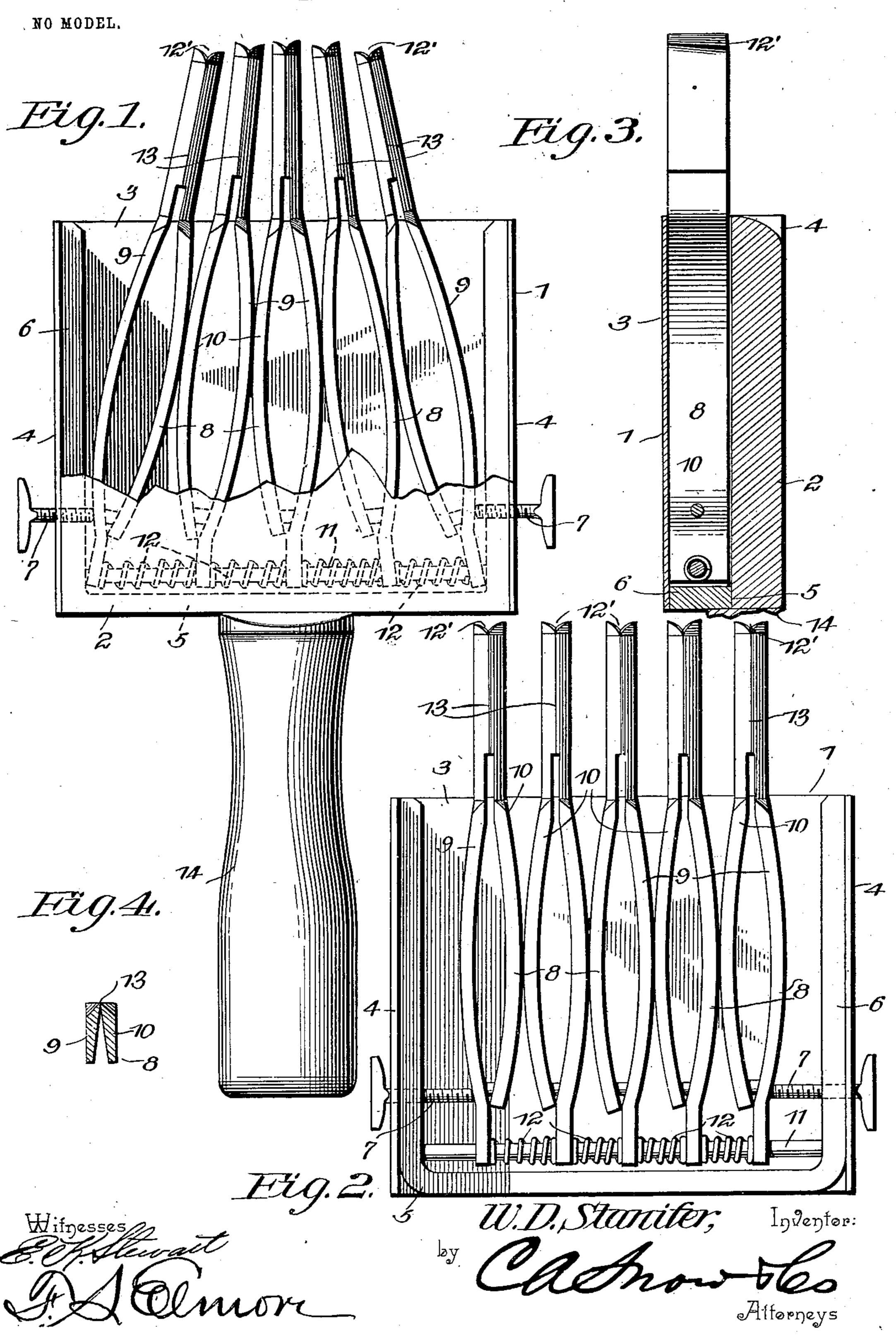
W. D. STANIFER. GIN SAW CLEANER. APPLICATION FILED MAR. 19, 1903.



United States Patent Office.

WILLIAM D. STANIFER, OF DURANT, INDIAN TERRITORY, ASSIGNOR OF TWO-THIRDS TO FRANCIS I. WILLIAMS AND JAMES R. RUTHERFORD, OF PARIS, TEXAS.

GIN-SAW CLEANER.

SPECIFICATION forming part of Letters Patent No. 730,803, dated June 9, 1903.

Application filed March 19, 1903. Serial No. 148,593. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. STANIFER, a citizen of the United States, residing at Durant, in the county of Blue, Choctaw Nation, Indian Territory, have invented a new and useful Gin-Saw Cleaner, of which the follow-

ing is a specification.

My invention relates to gin-saw cleaners and tooth-straighteners, and has for its object to produce a device of this character which will be simple of construction, efficient in operation, and one in which the saw-engaging knives or members may be simultaneously adjusted to regulate them for operation upon saws which are spaced apart a greater or lesser distance.

To these ends the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of the device. Fig. 2 is a similar view with the side plate removed. Fig. 3 is a vertical transvere sectional eleva-

tion. Fig. 4 is a detailed section.

Referring to the drawings, 1 indicates a casing comprising a removable side plate 2, a permanent side plate 3, end plates 4, and a bottom plate 5. The side plate 3 consists, preferably, of sheet metal, which is angularly 30 bent to form ends 4, while the removable side plate 2 is composed of wood and is secured in position by means of screws, which engage the same through suitable perforations formed through the end plates 4. 35 Within the casing is mounted a U-shaped member the crown of which constitutes the bottom 5 of the casing, while its arms 6 lie along the inner faces of the end plates and have tapped through them set-screws 7, the 40 purpose of which will be presently described.

Sindicates a series of knives or members mounted in the casing and having their ends projecting from the open top of the same in position to act upon the saw-blades, as more fully hereinafter described. Each of these knives is composed of a pair of metal plates 9 10, which lie parallel at their upper ends to constitute the active portion of the knife and which are oppositely bowed or curved throughout the body portion of the knife, and the plates are riveted together at their lower

ends. The plate 9 is of greater length than 10 and has its end which projects below the plate 10 perforated and mounted upon a rod or shaft 11, which extends horizontally across 55 the casing near its bottom and has its ends seated in the end walls of the latter. The blades, which are movable longitudinally of the shaft 11, have interposed between them coiled springs 12, which are normally ex- 60 panded and which lie one between each pair of knives. Thus the springs tend to spread the knives at their lower ends to the fullest extent possible within the casing, which action causes their upper ends to lie in close 65 side relation, or, in other words, in position to engage the respective saws of the series which are spaced but a short distance apart. When, however, it is desired to spread the upper ends of the blades from one another 70 for engagement with the respective saws of a series which are spaced a greater distance apart, the set-screws 7 at opposite ends of the casing are manipulated to force the lower ends of the blades inward toward each 75 other, which action spreads the upper active ends of the blades, as will be readily understood. In this connection it is to be noted that during the operation of adjusting the blades for engagement with saws which 80 are spaced a greater or lesser distance apart the body portions of the blades will rock one upon another, owing to the fact that their meeting sides are reversely curved, and, further, that so curving the plates which consti- 85 tute the blades renders them yieldable during the active engagement with the saws. The outer active ends of the knives, as before stated, consist of the parallel portions of the two plates 9 and 10, the outer terminals of 90 which plates are beveled reversely to form a recess 12, which admits of the ready entrance of the saw between the knife-plates, and, further, the inner meeting faces of the plates are beveled transversely in reverse directions, 95 whereby the sharpened edges 13 of the knives will during the operation of the latter upon the saws bear firmly upon opposite sides of the same and thoroughly scrape and clean the saw-blades in a manner readily under- 100 stood.

Secured to the removable plate 2 in any suit-

able manner is a handle 14, by which the de-

vice may be manipulated.

From the foregoing it will be seen that I produce a simple and efficient device which 5 may be readily operated for cleaning saws and one which may be quickly adjusted to accommodate it to the spacing of the sawblades. In attaining these ends it is to be understood that I do not limit or confine myself to to the precise details herein shown and described, inasmuch as minor changes may be made therein without departing from the spirit or scope of my invention.

Having thus described my invention, what

15 I claim is—

1. In a device of the class described, the combination with a holder, of a plurality of knives carried thereby and extending in a common direction, and means for simultane-20 ously adjusting the knives to vary their lateral spacing.

2. In a device of the class described, the combination with a casing, of a rod mounted therein, a plurality of knives movably con-25 nected with the rod, and means for simultaneously adjusting the knives to vary the

lateral spacing of their active ends.

3. In a device of the class described, the combination with a casing, of a rod mounted 30 therein, a plurality of knives movably connected with the rod and contacting one with another, the contacting faces of the knives being reversely curved, and means for compressing or spreading the inner ends of the 35 knives for causing their curved faces to rock one upon another for simultaneous adjustment of their active ends.

4. In a device of the class described, the combination with a casing, of a rod mounted therein, a plurality of knives arranged side 40 by side within the casing and having their adjacent faces reversely curved and their ends movably engaged with the rod, springs carried by the rod and interposed between the inner ends of the knives, and means for com- 45 pressing said ends of the knives against the action of the springs, whereby the knives will rock one upon another and their active ends

be simultaneously adjusted.

5. In a device of the class described, the 50 combination with a casing, of a rod mounted therein, a plurality of knives having their inner ends movably engaging the rod, said knives being arranged side by side with their adjacent faces reversely curved, springs 55 mounted on the rod between the inner ends of the knives and tending normally to force the latter away from each other, and setscrews tapped through the casing and operable to compress the ends of the knives against 60 the action of the springs, whereby the active ends of the knives will be simultaneously adjusted.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 65

the presence of two witnesses.

WILLIAM D. STANIFER.

Witnesses:

J. M. JOHNSON, W. H. RITCHEY.