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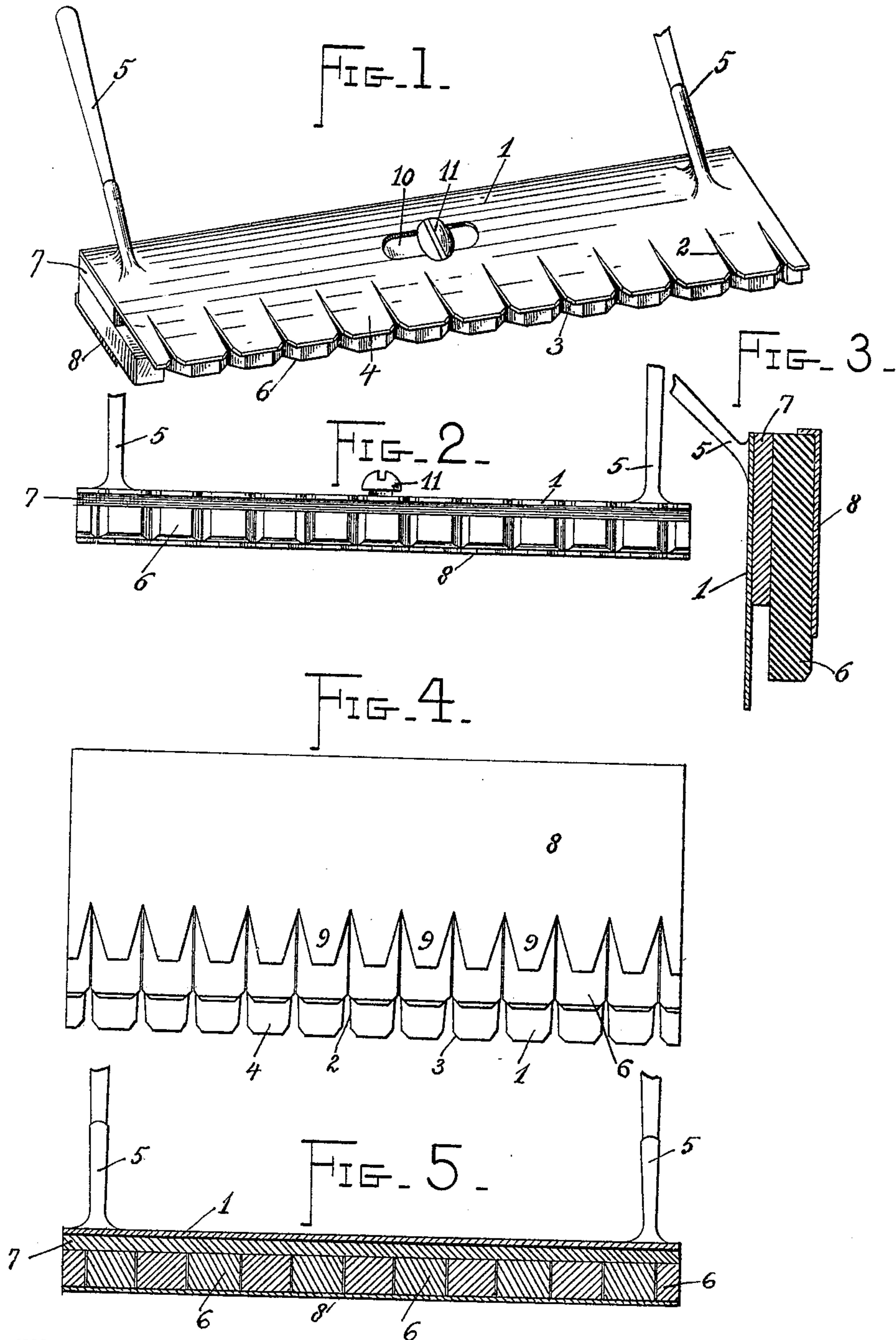
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G. P. ROBERTS.

MACHINE FOR CLEANING AND STRAIGHTENING GIN SAW TEETH.

(Application filed Feb. 2, 1897.)

(No Model.)



WITNESSES

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# UNITED STATES PATENT OFFICE.

GEORGE P. ROBERTS, OF LACEY, ARKANSAS.

MACHINE FOR CLEANING AND STRAIGHTENING GIN-SAW TEETH.

SPECIFICATION forming part of Letters Patent No. 619,842, dated February 21, 1899.

Application filed February 2, 1897. Serial No. 621,616. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE P. ROBERTS, a citizen of the United States, residing at Lacey, in the county of Drew and State of Arkansas, have invented certain new and useful Improvements in Machines for Cleaning and Straightening Gin-Saw Teeth; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to devices for cleaning and straightening the teeth of gin-saws; and the object in view is to provide an attachment for a cotton-gin by means of which the teeth of the gin-saws may not only be cleaned and freed from the gum deposited thereon while ginning wet or immature cotton, but also straightened.

The invention consists in certain novel features and details of construction and relative arrangement of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the improved device for cleaning and straightening saw-gin teeth. Fig. 2 is a front elevation of the same. Fig. 3 is a transverse section through the cleaning and straightening device. Fig. 4 is a bottom plan view thereof. Fig. 5 is a longitudinal section through the device.

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

Referring to the drawings, 1 designates a metal top plate which is preferably formed from sheet-steel of sufficient length to extend across the edges of all the saws. This plate is provided at its front edge with a series of slots or incisions 2, the opposite edges of which converge inwardly, as shown, and the outer portions of which are flared, as indicated at 3, to facilitate the entrance of the saw-teeth. This construction affords a plurality of tabs or scrapers 4, adapted to enter between adjacent saws for the purpose of removing any gum or other matter which may adhere to the surfaces of the saws and also for straightening the teeth of the saws.

5 designates a pair of handles for placing the device in position in the saw-gin and re-

moving the same therefrom after the saws have been operated upon.

Arranged under the plate 1 are rubber blocks 6 of about the same width as the tabs or scrapers 4 and of less length than the width of plate 1, so that the front edges of said rubber blocks terminate short of the advanced edges of said scrapers. The blocks 6 are also spaced sufficiently apart to permit the saw-teeth to pass between them, and they thus serve to remove any gum or cotton remaining on the saw-teeth after said teeth have passed through the slots or incisions 2 of the top plate. A spacing-strip 7, of wood or other suitable material, is interposed between the top plate 1 and the block 6, so as to permit the escape of the gum and cotton, &c., which pass through the slots 2 and thus prevent the same from becoming clogged between the adjacent surfaces of the blocks 6. The blocks 6 are also beveled at their advanced corners to form splayed entrances between the blocks.

8 designates a bottom plate or strip which may be either of metal or wood and which is provided at its advanced edges with V-shaped notches 9, coincident with the spaces between the blocks 6. The rear edge of the plate 8 is upturned to form a flange which lies against the rear side of the rubber blocks 6. The bottom plate 8, rubber blocks 6, and spacing-strips 7 are all secured permanently together, while the top plate 1 is provided with a transverse slot 10 for the reception of a thumb-screw 11, which passes through the plate 1 of the strip 7 and permits the top plate to be adjusted relatively to the underlying portions of the device, so that the rubber blocks may be adjusted into proper relation to the teeth of the gin-saws. The bottom piece 8 is preferably made of wood and shaped to fit the ribs of the gin-breast, thus making the device self-adjusting.

The handles 5 may be placed wherever convenient.

In operation the gin is stopped and the cleaning device applied to the machine. The saws are then reversed or turned backward one or more revolutions, thereby causing the saws to pass through the slots or incisions in the top plate 1 and then between the rubber blocks, thus removing all wet cotton and gum from the saws. The device may now



be detached from the machine, when the latter is again in condition for receiving the cotton to be ginned. Not only are the cotton and gum removed from the saws, but the 5 teeth thereof are straightened by contact with the edges of the tabs or scrapers 4.

The device is particularly desirable or useful when ginning wet or green cotton, as under such conditions the saws necessarily 10 become clogged and will not properly perform their work unless periodically cleaned.

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

15 1. A device for cleaning and straightening saw-gin teeth, comprising a pair of plates spaced apart and provided at their advance edges with incisions or notches, a plurality of rubber blocks interposed between said plates 20 and rigidly supported at their active edges and also arranged to leave intervening spaces between them for the saw-teeth, and a spacing-strip interposed between said blocks and one of the plates and terminating in the rear 25 of the acting edges of the rubber blocks so as to leave a space between the plate and rubber blocks, substantially as described.

2. A device for cleaning and straightening saw-gin teeth comprising a pair of plates, one 30 of which is provided at its advance edge with a series of slots or incisions for the saw-teeth, a plurality of rubber blocks interposed between said plates and spaced apart to receive

the saw-teeth, a spacing-strip interposed between said blocks and the slotted plate and 35 a screw passing through the slotted plate and entering the spacing-strip for permitting said plate to be adjusted relatively to the remaining portion of the device, the spacing-strip terminating in the rear of the acting 40 edges of the rubber blocks so as to leave a space between the plate and rubber blocks, substantially as described.

3. A device for cleaning and straightening saw-gin teeth, comprising a top plate having 45 V-shaped incisions for receiving said saw-teeth, a bottom plate having V-shaped notches alining with the slots in the top plate, a plurality of rubber blocks interposed between the plates and arranged to receive 50 the saw-teeth between them, the rear edge of the bottom plate being upturned to form a flange which bears against the rear ends of said blocks, a spacing-strip interposed between said blocks and the top plate and com- 55 mon to all the blocks, handles on the top plate, and means for adjusting said top plate relatively to the remainder of the device, substantially as described.

In testimony whereof I have signed this 60 specification in the presence of two subscribing witnesses.

GEORGE P. ROBERTS.

Witnesses:

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A. L. OSLIN.