

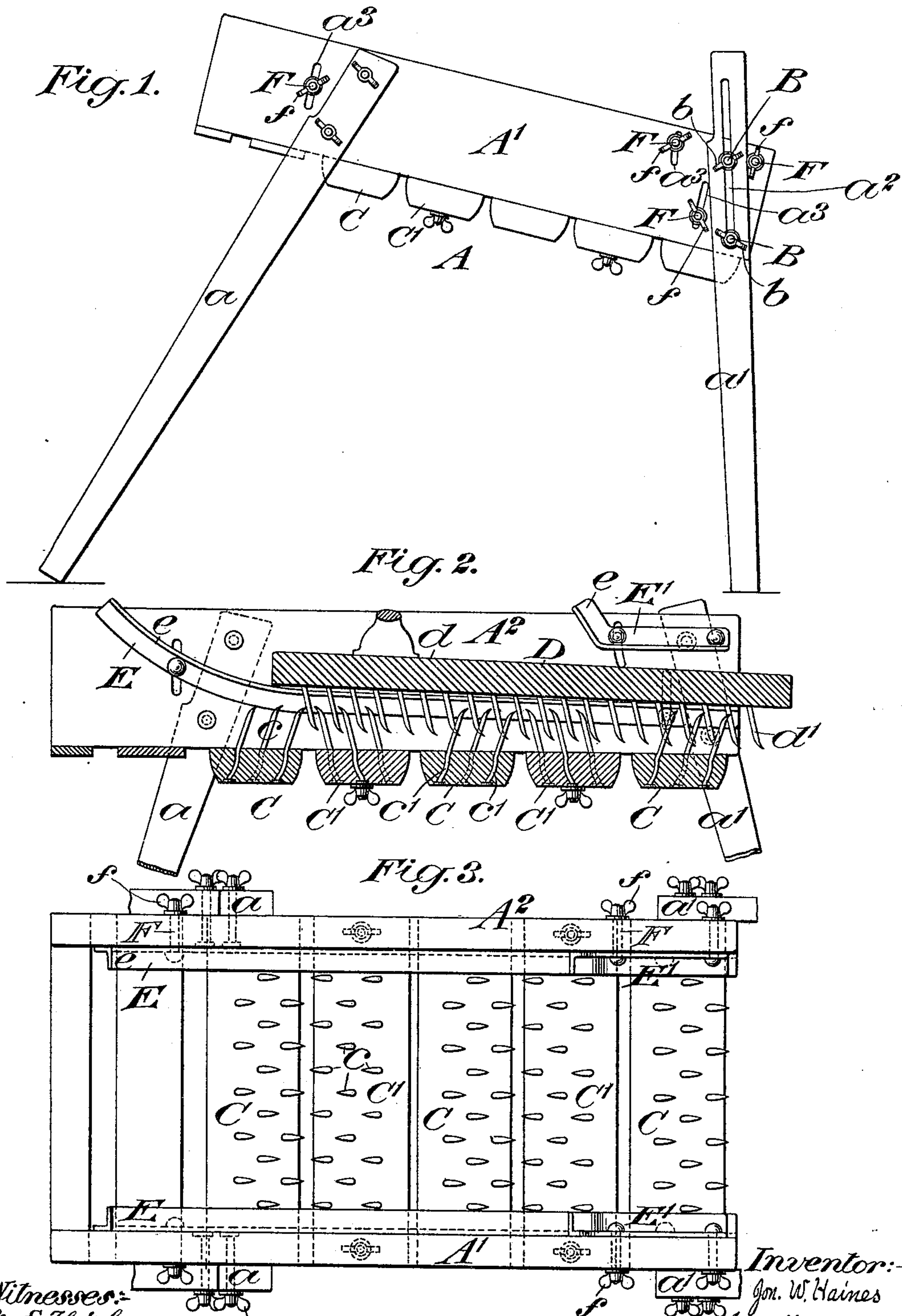
No. 630,606.

Patented Aug. 8, 1899.

J. W. HAINES.
HAIR PICKER.

(Application filed Aug. 5, 1898.)

(No Model.)



Witnesses:-
M. E. Fletcher.
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Inventor:-
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UNITED STATES PATENT OFFICE.

JOHNATHAN W. HAINES, OF NEW YORK, N. Y.

HAIR-PICKER.

SPECIFICATION forming part of Letters Patent No. 630,606, dated August 8, 1899.

Application filed August 5, 1898. Serial No. 687,775. (No model.)

To all whom it may concern:

Be it known that I, JOHNATHAN W. HAINES, a citizen of the United States, and a resident of New York, in the county and State of New York, have invented a new and useful Improvement in Hair-Pickers, of which the following is a specification.

My invention relates to an improvement in picking-machines, and more particularly to a portable or hand picking-machine for general use in small establishments—as, for example, in making mattresses from hair, cotton, or other fibrous material.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a view of the machine in side elevation. Fig. 2 is an enlarged view in vertical longitudinal section, and Fig. 3 is a top plan view.

The supporting-frame in the machine comprises a body portion composed of a bottom A and two sides A' A², supported upon four legs, two at each of the opposite ends of the body. The legs at the end of the machine at which the operator is located are denoted by *a* and those at the opposite end by *a'*.

For the purpose of changing the pitch of the body of the machine to bring the material to be fed more or less under the influence of gravity according to the readiness with which the material will naturally enter the machine I make the connection between the legs and the body such that the discharge end of the body may be raised and lowered to bring the body nearer to or farther away from a level or horizontal position, as the case may be. This adjustable connection of the leg with the body may be conveniently made by means of a bolt B, extending through the side and through an elongated slot *a*² in the leg, the bolt being provided with a tail-nut *b* for clamping the leg to the body when the latter has been adjusted to the desired pitch.

The bottom A of the supporting-frame is of skeleton formation, and intermediate of its ends there are located a series of removable sections C C', &c., each provided with a gang of teeth *c* set at an angle to the face of the section, so that one or more of the gang of teeth may be set to slant in an opposite direction from the adjacent gang to accelerate

or hinder the rate of feed of the material, as may be required. In the present instance I have shown the gangs of teeth arranged alternately slanting in opposite directions; but they may be made to all slant in the same direction, or there may be two gangs successively arranged to slant in the same direction and then a third gang in an opposite direction by simply shifting end with the sections, which are in the present instance held to the supporting-frame by screws.

The manner of locking the teeth in the sections C C' is as follows: A hole about the size of the tooth is bored in the section and that part of the shank of the tooth which is to engage the wall of the hole is made winding or slightly curved out of true, as shown at *c'*, so that when the tooth is driven into the hole it will compress the wood alternately on opposite sides of the hole, and thereby become firmly locked in its position.

The teeth *c*, which project upwardly from the bottom of the frame or casing, when considered as a whole have a staggered relation with respect to one another—that is, the individual members of each longitudinal row are located opposite a point intermediate of the teeth of a succeeding row—thereby materially reducing the liability to break the hairs or fibers, while at the same time subjecting them to an effective combing action.

The movable picker is denoted as a whole by D and is composed of a substantially flat back *d*, from which the teeth *d'* project in rows adapted to pass between the longitudinal rows of teeth in the under picker as the upper or movable picker is reciprocated. The upper or movable picker D is mounted on tracks E E', located on the inner faces of the sides A' A², and the ends of the tracks toward the operator are curved upwardly, as shown at *e e'*, for the purpose of carrying the movable picker away from and toward the lower picker as the latter is drawn backwardly and forwardly during its operation. The tracks E E' are made adjustable toward and away from the lower picker, so as to bring the upper picker nearer to and farther away from the under picker to suit the different requirements of the machine. In the present instance the tracks are adjusted up and down by means of screws F and nuts *f*,

the said screws working through elongated slots a^3 in the sides of the supporting-frame.

It is obvious that changes might be resorted to in the form and arrangement of the several
5 parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein shown and described; but

What I claim is—

10 1. A hand or portable picking-machine comprising a supporting-frame, a lower picker permanently fixed in the frame, an upper picker arranged to coöperate with the lower
15 picker and vertically-adjustable tracks for guiding the upper picker toward and away from the lower picker during its longitudinal reciprocating movements the tracks being
20 set forth. curved at their forward ends away from the position of the lower picker, substantially as

2. In combination, a supporting-frame, a

lower picker having the teeth arranged in staggered order, an upper picker having its teeth arranged to travel between the teeth of the lower picker and curved tracks arranged
25 to throw the upper picker toward and away from the lower picker during its reciprocating movement, substantially as set forth.

3. In combination, upper and lower pickers arranged to coact with one another, the teeth
30 of the pickers having their shanks crooked to alternately impinge upon opposite sides of the sockets in which they are held, substantially as set forth.

In testimony that I claim the foregoing as
35 my invention I have signed my name in presence of two witnesses.

JOHNATHAN W. HAINES.

Witnesses:

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