E. W. MELLIEN.

COMB CLEANER.

APPLICATION FILED JULY 26, 1916.

1,274,573. Patented Aug. 6, 1918.

Fig. 1.

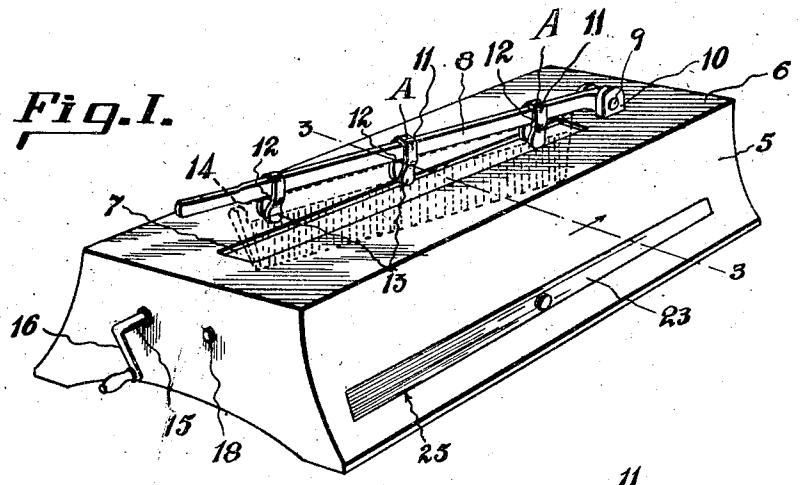


Fig. 2.

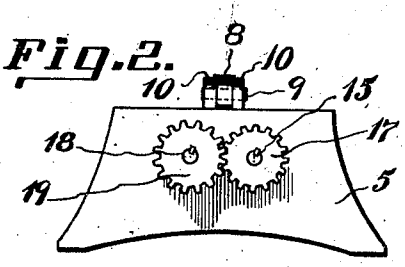


Fig. 3.

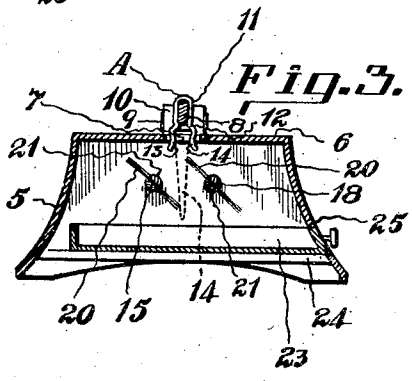
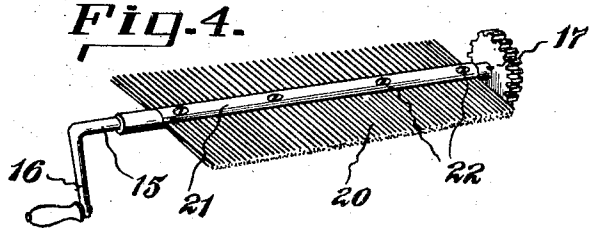


Fig. 4.



INVENTOR

Ernest W. Mellien

BY Richard B. Owen.

ATTORNEY

WITNESSES

Thos. F. Knox

M. E. Jones

UNITED STATES PATENT OFFICE.

ERNEST W. MELLIEN, OF ROGERSON, IDAHO.

COMB-CLEANER.

1,274,573. Specification of Letters Patent. Patented Aug. 6, 1918.

Application filed July 26, 1916. Serial No. 111,469.

To all whom it may concern:

Be it known that I, ERNEST W. MELLIEN, a citizen of the United States, residing at Rogerson, in the county of Twin Falls and State of Idaho, have invented certain new and useful Improvements in Comb-Cleaners, of which the following is a specification.

My invention relates to a comb cleaning machine and while it generally aims to provide an improved, simplified and more efficient machine of this nature, yet it specifically aims to provide a novel means for holding the comb during the cleaning operation being particularly in the form of a bar which may be pivoted to serve as a lever and which mounts adjustable comb clasping means; a novel form of clasp serving dually to clasp the bar or lever for its support and as well clasp the comb, and to provide a plurality of cleaning brushes, preferably having metallic wire bristles and arranged to brush the comb one at a time and successively.

With the above and additional objects, such as will become apparent as the description progresses hereinafter, the invention has been embodied in one preferred form as illustrated in accompanying drawings; wherein:—

Figure 1 is a perspective view of the cleaning machine;

Fig. 2 is a rear end view;

Fig. 3 is a cross sectional view on the line 3—3 of Fig. 1, and

Fig. 4 is a perspective view of the operating shaft, brush means thereof and gear wheel keyed thereto.

Referring specifically to the drawings, a casing or housing 5 of suitable shape is provided which has a raised or top wall 6 provided with a central elongated comb inserting opening 7. While any suitable means may be utilized to support the comb, yet I prefer to use the means which will now be specifically described. A lever 8 is provided to this end, having pivot means 9 engaging lugs 10 integral with and upstanding from the wall 6. Suitable clasp members are carried by the lever which may be fixed thereto or movable longitudinally thereof as preferred. These clasp devices are designated A and in actual use, I preferably but not necessarily rigidly attach the clasp A nearest the pivot 9 to the lever and the other clasp members I slidably and adjustably attach to the said lever. These clasp members may be made from a single strip of resilient metallic or other material and are bent to form a loop 11 which embraces and surrounds the lever 8, frictionally engaging it. The sides of the loop below the lever extend inwardly as at 12 to provide a stable construction and then the same clasp arms 13 extend downwardly, and are adapted to receive the comb between them as suggested by the comb, in dotted lines at 14 in Figs. 1 and 3. It is clear that the comb may be detachably secured thereto. By means of the adjustable clasps, combs of different lengths may be accommodated and effectively supported from the lever. The lever swings in a vertical plane and therefore may be moved upwardly to facilitate attachment of the comb and to facilitate removal of the comb after a cleaning operation.

The clasp arms 13 extend into the opening 7 and relatively close to the side walls at said opening, in order to limit the lateral or sidewise movement of the comb and clasp arms under the cleaning action of the brushes.

Suitable cleaning mechanism is disposed within the casing 5 and in this connection, a main shaft 15 is employed which is journaled in the end wall of the casing. At one end, this shaft 15 has an operating crank 16 and at the opposite end it has a gear wheel 17 keyed thereto. A second shaft 18 is journaled in the end walls of the casing 5 and at one end it has a gear wheel 19 keyed thereto and in mesh with the gear wheel as shown in Fig. 2. Each shaft 15 and 18 is cut away throughout the major portion of its length so as to be segmental in cross section and have a flat wall against which bristles 20 rest and which extend equidistantly from opposite sides of the shaft. These bristles 20 are preferably metallic wires although they may be made of any suitable material. In order to secure the bristles in place, binding strips 21 are placed over the bristles and over the shafts 15 and 18 and fastened thereto as by means of set screws 22. When the comb is positioned as shown in Fig. 1, and the crank 16 is operated, shaft 15 turns and through the medium of the gear wheels 17 and 19, shaft 18 also turns. As a result, the bristles 20 of one brush at a time are brought into brushing relation with the comb and the operation is successive. In this way the adhering matter is brushed from the comb,

Below the comb and the cleaning means, a drawer 23 is disposed so as to catch the cleanings. This drawer may be supported by a rib 24 interiorly of the casing 5 and be movable through an opening 25 of a side wall of the casing.

Since merely the preferred embodiment of the invention has been illustrated and described, it is to be understood that the changes in the details of construction may be resorted to without departing from the spirit and scope of the invention.

By considering Fig. 3 it will be seen that the bristles of one brush while rotating will work well within the path of travel of the bristles of the adjoining brush and by having one brush follow after the other brush, the comb will be thoroughly swept or brushed from opposite sides at alternate times toward the lower end of the comb and thereby efficiently clean the comb between the teeth thereof.

I claim:—

1. A comb cleaner of the class described comprising a casing, a comb supporting member carried thereby, a pair of flat cleaning brushes mounted within said casing, each brush provided with laterally extending bristles, the path of movement of the bristles of one brush being adapted to extend within the path of movement of the bristles of the adjoining brush, and means for operating said brushes in opposite direction toward each other.

2. A comb cleaner of the class described comprising a casing, a comb supporting member carried thereby, a pair of substantially flat brush members mounted within said casing and provided with bristles, meshing gears carried by each brush for causing the brushes to rotate in opposite directions toward each other and the bristles of one brush being adapted to extend well within the path of movement of the bristles of the other brush for alternately brushing a comb supported within said casing from opposite sides.

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

ERNEST W. MELLIEN.

Witnesses:
THOMAS H. THOMPSON,
ADAM J. MYE.