F. G. SARGENT.

CARRIER FOR WOOL WASHING MACHINES.

APPLICATION FILED JULY 8, 1910.

970,118. Patented Sept. 13, 1910.

Fig. 1.

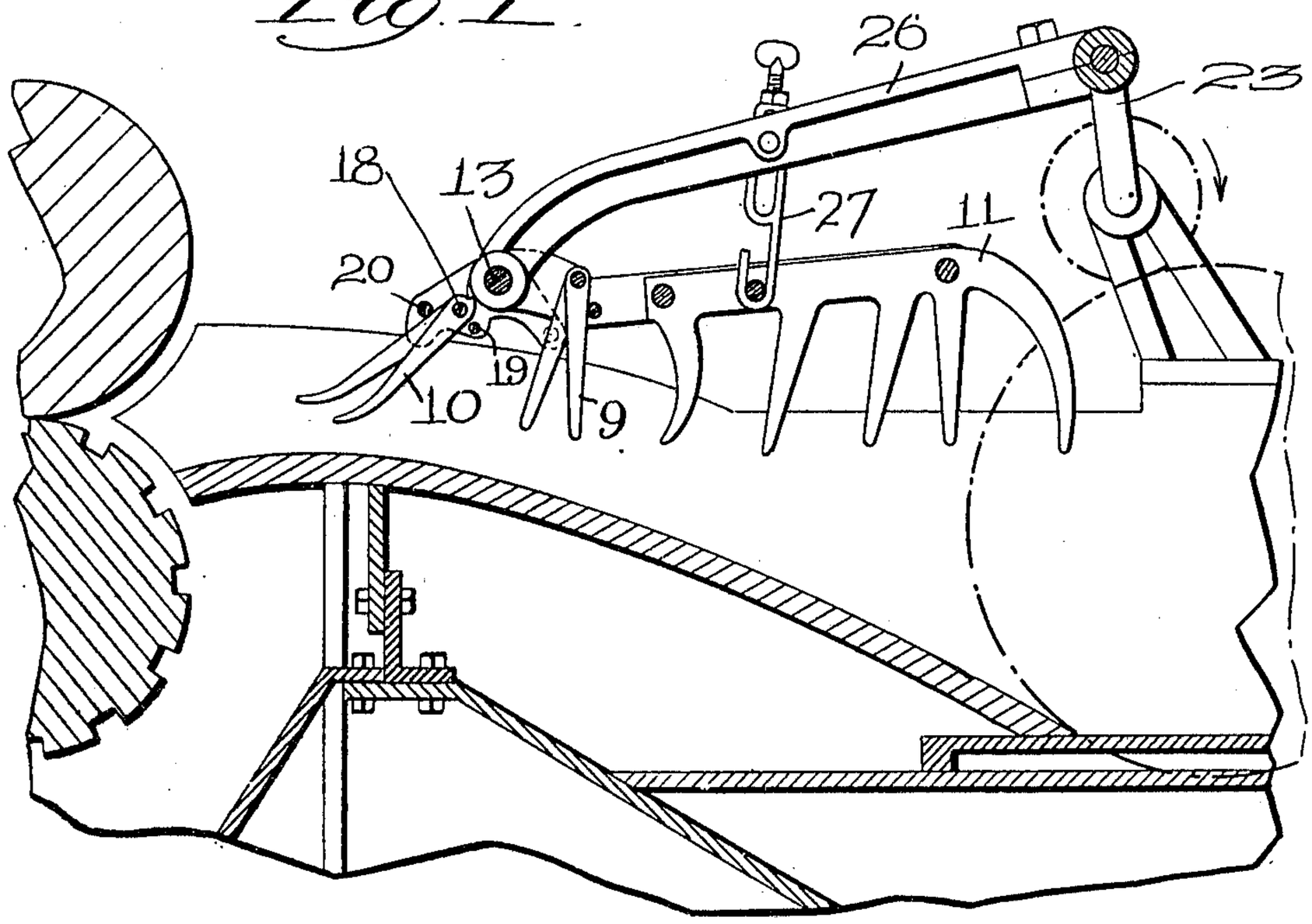
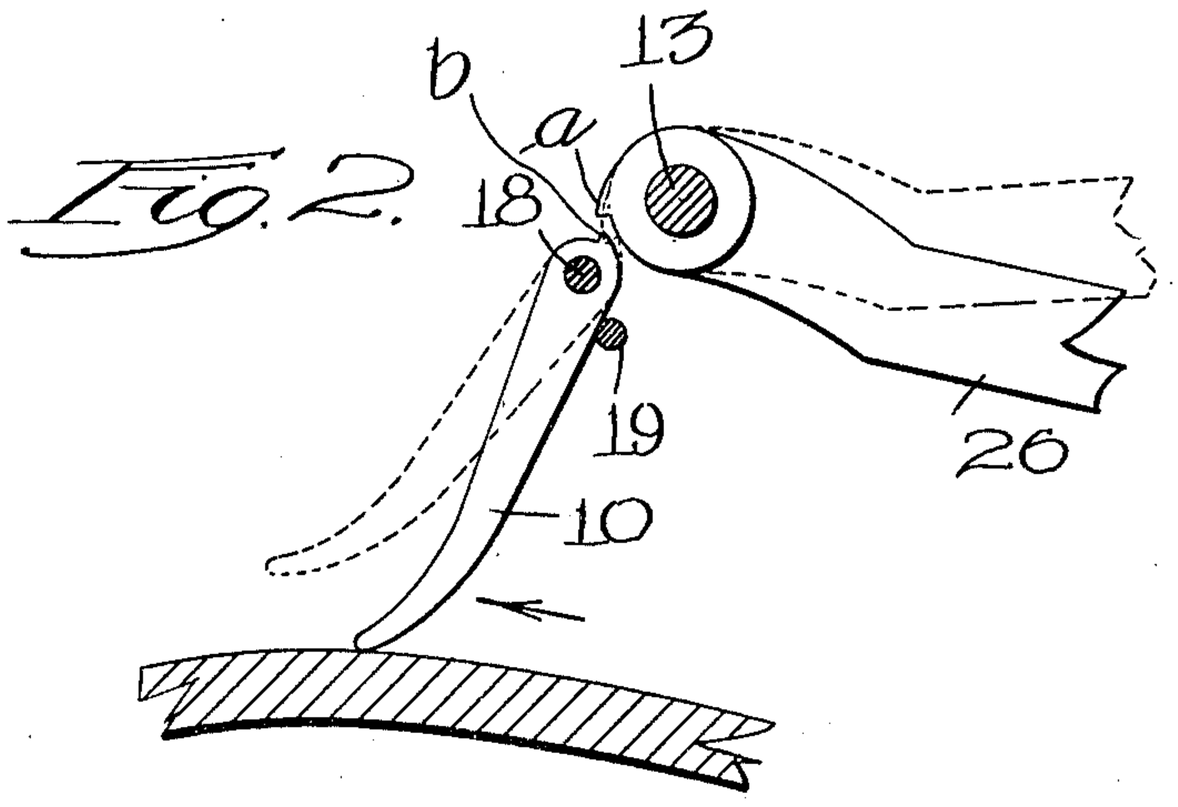


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

FREDERICK G. SARGENT, OF WESTFORD, MASSACHUSETTS, ASSIGNOR TO C. G. SARGENT'S SONS CORPORATION, OF GRANITEVILLE, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

CARRIER FOR WOOL-WASHING MACHINES.

970,118. Specification of Letters Patent. **Patented Sept. 13, 1910.**

Application filed July 8, 1910. Serial No. 570,948.

To all whom it may concern:

Be it known that I, FREDERICK G. SARGENT, a citizen of the United States, residing at Westford, in the county of Middlesex and State of Massachusetts, have invented a new and useful Carrier for Wool-Washing Machines, of which the following is a specification.

This invention relates to a carrier for a wool washing machine and is designed particularly as an improvement over that type thereof shown in my prior Patent No. 872,020, granted November 26, 1907.

The principal objects of this invention are to provide a simple practicable means for giving the forward teeth of the carrier shown therein a positive motion so that when the carrier is turned back they shall be positively swung up and will not bear on the wool, and on the return motion, they will swing back in place for engaging the wool in a positive manner.

Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of a part of a wool washing tank showing one of these carriers in side elevation, and Fig. 2 is a similar view of a portion thereof on enlarged scale.

The carrier shown in that patent is provided with sets of teeth 10 which are adapted to swing on a transverse rod 18 which carries them. Rods 19 and 20, are shown in said patent for preventing the teeth from swinging too high and from striking the tops of the press rolls. As the carrier is turned back, these teeth swing up as they drag on the wool but when it is going forward they catch the wool and carry the same into the rolls in a well known way. These carriers are shown in the patent as operated by the crank 23.

It will be observed that as the crank 23 rotates, it gives the connecting arms 26 an oscillating motion about the shaft 13 and the play is provided for by the form of the hooks 27 which lift the carrier arms 11. This oscillating motion is taken advantage of in this invention to produce the desired positive motion of the front teeth (9 or 10). For this purpose, the hub of each of the connecting arms 26 in which the shaft 13 bears is provided with a projection *a*. Each of the teeth 10 which are swung loosely on the rod 18 is provided with a similar but positive projection *b* in position to be engaged by one of the projections *a* when the hub is oscillated. The movement of the crank to bring the connecting arms around in position ready to start back after the forward motion operates to bring the projections *a* into contact with the projections *b* and lift the teeth into the dotted line position shown in Fig. 2. This position is maintained while the carrier is going back so that the teeth are lifted off the wool in a very simple way and have no tendency to draw the wool back down into the tank even if a large quantity of wool is left under the teeth.

When the carrier gets to the end of this backward motion and starts forward, the crank has come around to such position that the projections *a* are raised, which allows the teeth to drop back against the rod 19. If desired, instead of a projection *a* for each of the projections *b*, this can be continuous across the bowl and form a rod which will engage all of the projections *b* in the same way. In either case, it will be seen that the object is accomplished in an exceedingly simple manner and without materially adding to the expense, as the projections can be made on the castings and do not need to be machined.

While I have shown the invention as applied only to the end teeth 10, it will be understood that it can be applied in a similar manner to the next teeth 9, the same principles being carried out.

While I have illustrated and described a preferred form of the invention, I am aware that many modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore, I do not wish to be limited to all the details of construction shown and described, but

What I do claim is:—

1. In a wool washing machine, the combination with a carrier, swinging teeth on the carrier, and means on the carrier for positively swinging up the points of the teeth as the carrier moves backwardly.

2. In a wool washing machine, the combination with a carrier, swinging teeth on the carrier, and means on the carrier for posi-

tively swinging up the points of the teeth as the carrier moves backwardly and for permitting the teeth to drop at the beginning of the forward motion of the carrier.

3. In a wool washing machine, the combination with a bowl, of a carrier adapted to travel back and forth to deliver the wool from the bowl, swinging teeth mounted on the carrier, and means on the carrier for positively lifting said teeth during the backward travel of the carrier and allowing them to drop during its forward travel.

4. In a wool washing machine, the combination of a carrier adapted to travel back and forth, a set of pivoted teeth thereon, each tooth having a rearward projection, a connecting arm for operating said carrier, and means connected with the connecting arm for engaging said projections as the carrier moves back to lift the teeth.

5. In a machine of the character described, the combination of a crank, a connecting arm pivoted at one end to the crank, a carrier having a rod or shaft on which the other end of said connecting arm is pivoted, a projection on said connecting arm beyond said shaft, whereby as the crank rotates, said projection will oscillate, a set of teeth pivoted on the carrier, and means connecting the said teeth for engaging said projection, whereby the teeth will be lifted when the projection oscillates downwardly.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

FREDERICK G. SARGENT.

Witnesses:
CHAS. G. SARGENT,
OSBORN H. CILLEY.