

A. BALDWIN, SR.
CLOTH PRESSING MACHINE.
APPLICATION FILED OCT. 28, 1910.

1,007,666.

Patented Nov. 7, 1911.

2 SHEETS—SHEET 1.

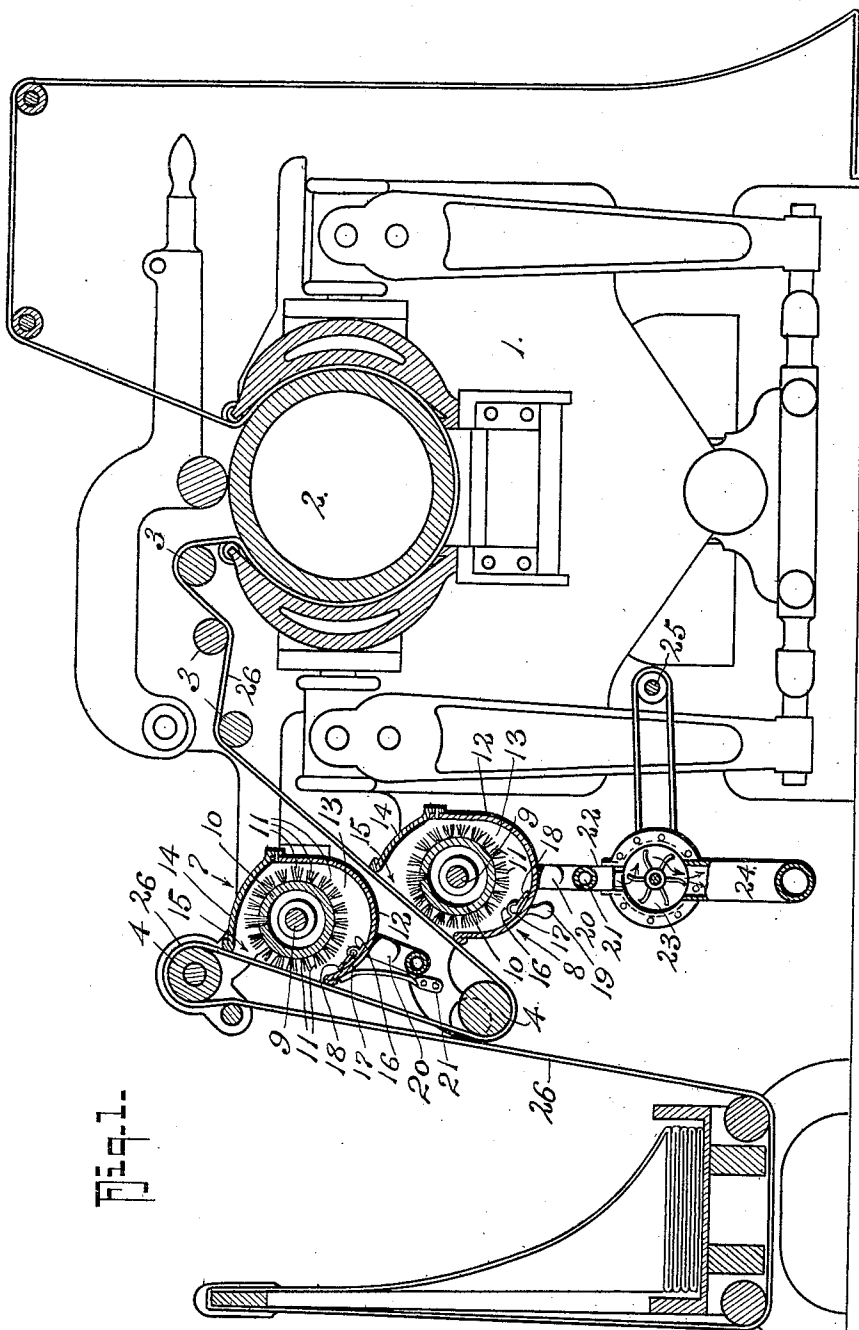


Fig. 1-

Witnesses
John T. Schrott
H. Woodard

Inventor
Alfred Baldwin, Sr.
BY
Fred G. Dietrich & Co.
Attorneys

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2 SHEETS-SHEET 2.

Fig. 2.

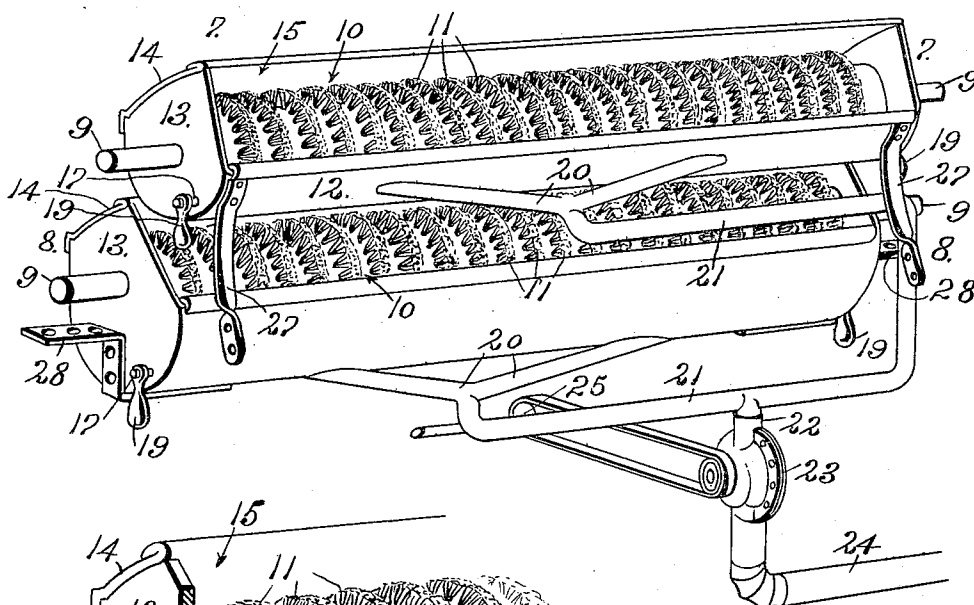


Fig. 3.

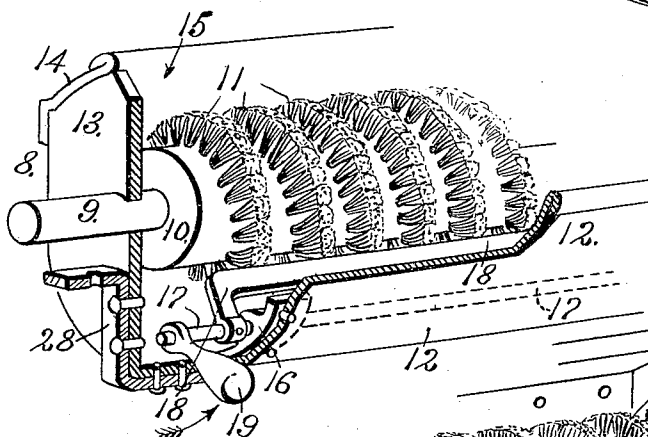
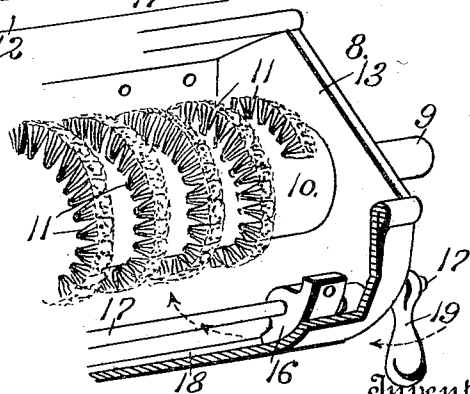


Fig. 4.



Witnesses

John E. Schrott
H. Woodard

Inventor
Alfred Baldwin, Sr.

By

Fred G. Dietrich
Attorneys

UNITED STATES PATENT OFFICE.

ALFRED BALDWIN, SR., OF GOFFS FALLS, NEW HAMPSHIRE.

CLOTH-PRESSING MACHINE.

1,007,666.

Specification of Letters Patent.

Patented Nov. 7, 1911.

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To all whom it may concern:

Be it known that I, ALFRED BALDWIN, Sr., residing at Goffs Falls, in the county of Hillsboro and State of New Hampshire, have invented certain new and useful Improvements in Cloth-Pressing Machines, of which the following is a specification.

Since rotatable power presses for pressing textile fabrics have been brought into use much difficulty and annoyance has been experienced owing to the streaking of the cloth when changing from a run of one color to a run of a lighter or darker color. In machines of the type stated when one kind of cloth, say, dark cloth has been run through the press, the darker flock or lint collect in the brushes and flock pans and then when a change is made to a run of light goods, the dark flocks or lint collected in the brushes and pans from the previously pressed dark goods will scatter in streaks in the light goods and be pressed therein, and thus the first of the run of light goods will be spoiled. The same thing happens after dark goods are run subsequently to a run of light goods, in which event the light streaks will appear on the dark goods. This is due to the fact that the brushes gather and retain a large part of the waste matter, giving it off subsequently to the goods. When the brushes give off the lint to the goods corresponding in color to the lint on the brushes no serious difficulty is encountered, the difficulty being met whenever a change is made from a run of one color to a run of a lighter or darker color.

As heretofore stated it is to prevent this very objectionable feature that I have produced my invention which resides in providing the brushes, that brush the cloth strip on alternate sides, with a housing, the mouth opening of which is covered by the passing strip of cloth.

The invention also resides in creating a suction or partial vacuum in said housing to withdraw all flocks, lint and dust, etc., from the passing strip, and also from the brushes and any stock thereon.

My invention also includes means for conveying the refuse from the housing to a suitable outlet outside of the machine, and the invention provides a means for engaging and flipping the brushes to cause the refuse held thereby to be released from the brushes by centrifugal force and suction and conveyed out of the housing.

More specifically the invention resides in those novel details of construction, combination and arrangement of parts all of which will be first fully described, then be specifically pointed out in the appended claims and illustrated in the accompanying drawings, in which:—

Figure 1, is a central vertical longitudinal section of a cloth pressing machine with my invention applied. Fig. 2, is a perspective view of my invention *per se*. Fig. 3, is an enlarged detail perspective view of a part of the invention a portion of the housing being broken away and shown in section. Fig. 4, is a similar view to Fig. 3 of the end of the device opposite to that shown in Fig. 3.

Referring now to the accompanying drawings in which like letters and numerals of reference indicate like parts in all of the figures, 1 designates a cloth pressing machine which may be of any approved type or construction and which includes the pressing drum 2, the intermediate guide rollers 3, the front guide rollers 4 and the pair of brushes that brush alternate sides of the cloth strip 26.

It is in the construction of the brushing mechanism 7—8 that my invention lies, the one mechanism 7 brushing the cloth on one side and the other mechanism 8 brushing it on the other side.

Each mechanism 7—8 comprises a rotating shaft 9 driven from any suitable moving part of the machine in the usual manner, a brush 10 having bristles 11, a flock pan 12 with the end closure heads 13 and the top closure plate 14 so constructed as to leave a mouth 15 over which the cloth strip 26 passes. The cloth strip 26 forms, as it were, a closure* for the mouth 15. Within each flock pan 12 is a pair of bearings 16 into which a rod 17 is mounted and on which a rod or flipper bar 18 is secured parallel to the shaft, the rod 17 and the shaft 9. The bar 18 is adapted to normally rest against the wall of the pan 12 and is adapted further to be moved to engage the bristles 11 of the brush by levers or handles 19 at the outside of the pan 12. The pans 12, end closures 13 and top plates 14 form housings for the brushes.

Each brush housing has a pair of outlets which open into a Y-pipe 20 that is in turn connected with a pipe 21 that leads into the inlet 22 of an air pump 23 which may be of

any approved type. The pump 23 delivers through a duct 24 to any suitable place. The pump or fan 23 is driven from any suitable moving part 25 of the machine in any well-known way. The upper and lower brush housings are suitably supported by brackets 27—28 that are secured to the framework of the machine in any desired manner.

10 In operation let us assume that a dark cloth is being pressed in the machine and it is desired to change it to a light run of cloth. A short time before the end of the run of dark cloth is reached, the attendant
15 moves the handles 19 to cause the bars 18 to engage the bristles of the brushes 11, thereby spreading and flipping them to dislodge the dust, lint etc. which is drawn loose, and it together with the loose refuse taken
20 from the cloth strip 26 as it passes over the respective mouths 15, is quickly sucked out of the respective housings by the blower, pump or fan 23 and driven off by the same to the desired place, thereby leaving the
25 brushes and housings thoroughly cleaned and free from refuse by the time the end of the run of dark cloth is reached so that when the light cloth is in place and being operated upon, no trace of dark cloth refuse
30 will be deposited on the light cloth strip. The same operation is repeated just prior to the changing from a light to a dark run of cloth.

I am aware that it has heretofore been
35 attempted to apply the principle of vacuum cleaning to various more or less analogous types of machines to remove dust, etc. from the working parts, but in all of those that have come to my attention a comparatively
40 enormous power or vacuum producing force has to be employed to effect the desired results, while by employing my invention, it will be seen a minimum amount of power is necessary, as the force of suction is employed in such a manner as to operate on
45 only a restricted area of the strip being pressed and first on one side and then on the other.

From the foregoing description, taken in
50 connection with the accompanying drawings, it is thought the complete construction, operation and advantages of my invention will be readily understood by those skilled in the art to which the invention ap-
55 pertains.

What I claim is:

1. In a cloth pressing machine having a rotary brush, an agitating bar running parallel with said brush, means for mounting
60 said bar in position to lie normally out of contact with said brush, means whereby said bar may be moved at will into contact with said brush to bend the bristles of the brush and cause any refuse that may have col-
65 lected in said brush to be loosened and

thrown off by the momentum of said brush, a brush casing for inclosing said brush and bar, said casing having a mouth over which the cloth strip being operated upon passes, said cloth strip serving to form a closure
70 for said mouth and means for removing the refuse contents from said brush housing and delivering the same to the outside of the housing.

2. In a cloth pressing machine having a rotary brush, a casing inclosing said brush, said casing having a mouth over which the cloth strip passes, said cloth strip serving as a closure for said mouth, a pipe connected with said casing, said housing having an
80 outlet, and means for causing a current of air to pass into said housing through its mouth and through said cloth strip and out of said housing through its outlet to carry away the lint and refuse from said housing
85 and brush.

3. In a cloth pressing machine having a rotary brush, a casing inclosing said brush, said casing having a mouth over which the cloth strip passes, said cloth strip serving as
90 a closure for said mouth, a pipe connected with said casing, said housing having an outlet, means for causing a current of air to pass into said housing through its mouth and out of said housing through its outlet
95 to carry away the lint and refuse from said housing and brush, and means within said housing for engaging said brush to flip the bristles of the same, and means on the outside of the housing connected with said
100 bristle flipping means in virtue of which said bristle flipping means may be moved into and out of engagement with the brush bristles.

4. In a cloth pressing machine, guide
105 rollers over which the cloth strip passes to the pressing mechanism, a pair of rotary brushes mounted in said machine to simultaneously brush alternate sides of said moving strip at different locations, a housing for
110 each of said brushes having a mouth over which the passing strip of cloth moves and forms a closure for said mouths, and a single means for producing a suction through said cloth strip and from said housings to with-
115 draw the loose contents of said housing.

5. In a cloth pressing machine, guide rollers over which the cloth strip passes to the pressing mechanism, a pair of rotary
120 brushes mounted in said machine to brush alternate sides of said moving strip, a housing for each of said brushes having a mouth over which the passing strip of cloth moves and forms a closure for said mouths, a single
125 means for producing a suction through said cloth strip from said housings to withdraw the loose contents of said housing, and means within each housing normally out of contact with the respective brushes for flip-
130 ping the brush bristles to cause them to give

up their refuse and means on the outside of the housing in virtue of which said flipping means may be brought into action.

6. In a cloth pressing machine, guide rolls
5 over which the cloth strip passes to the pressing rollers, a rotary brush for brushing said strip in its travel, a housing inclosing said brush, said housing having a mouth
10 over which said cloth strip passes to form a closure for the same, means for sucking air into said housing through said cloth strip as it passes over said mouth, and to
15 withdraw the refuse from said cloth strip, and said brush and convey it away from said housing.

7. In a cloth pressing machine, guide rolls over which the cloth strip passes to the pressing rollers, a rotary brush for brushing
20 said strip in its travel, a housing inclosing said brush, said housing having a mouth

over which said cloth strip passes to form a closure for the same, means for sucking air into said housing through said cloth strip as it passes over said mouth, and to withdraw the refuse from said cloth strip, and
25 said brushing and convey it away from said housing, and a brush flipping device mounted within said housing and consisting of a shaft, bearings within said housing in which
30 said shaft is mounted, a flipping bar mounted on said shaft to turn with the same, said shaft projecting out of said housing, and a weighted handle on the projecting end of said shaft for retaining said flipping bar out of contact with said brush.

ALFRED BALDWIN, Sr.

Witnesses:

FRED R. STARK,

WILLIAM M. HOLMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."