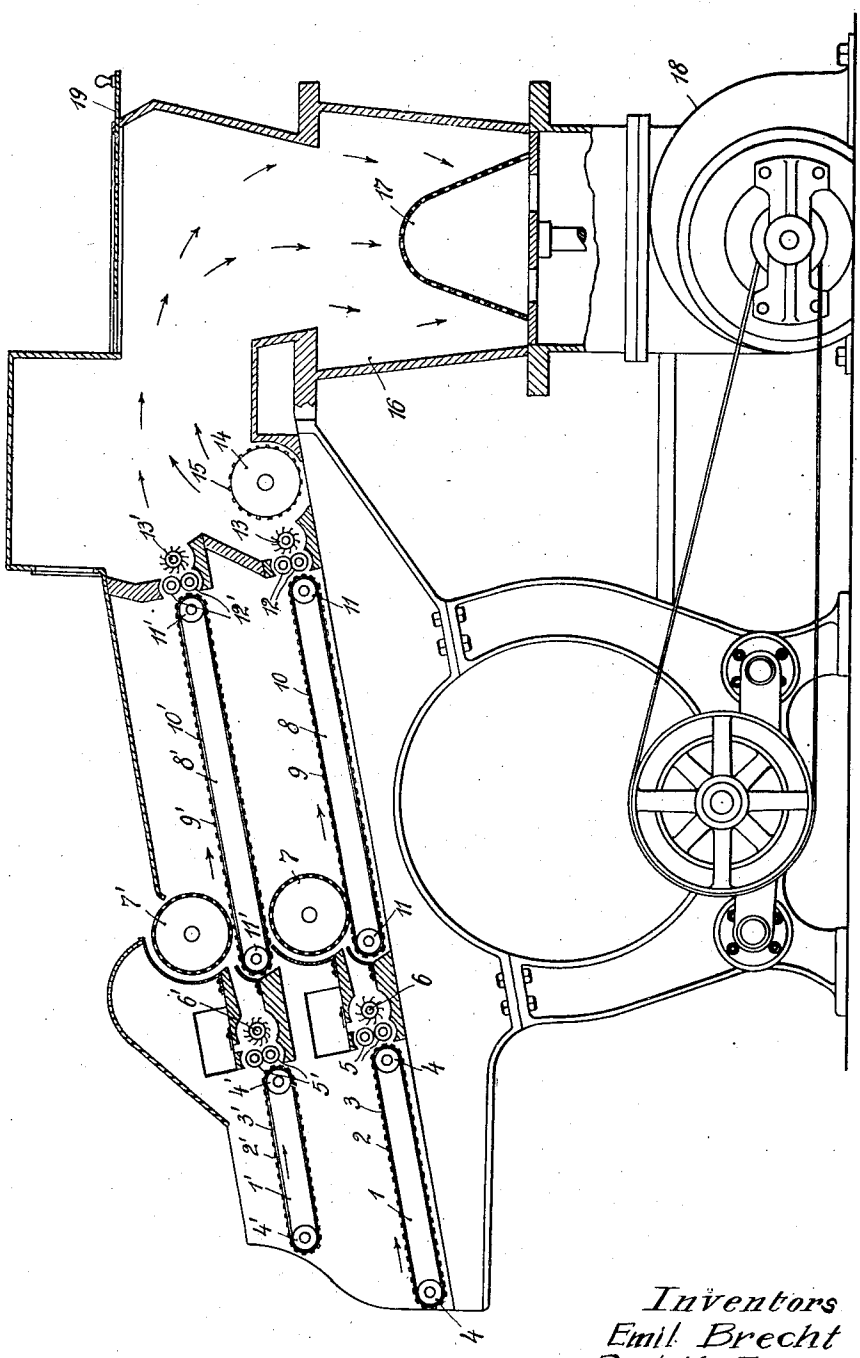
Nov. 15, 1927. 1,649,335

E. BRECHT ET AL

BLOWING MACHINE FOR THE MANUFACTURE OF FELTS

Filed Dec. 18, 1926



Inventors
Emil Brecht
Rudolf Fugmann
By
Attorney

Patented Nov. 15, 1927. 1,649,335

UNITED STATES PATENT OFFICE.

EMIL BRECHT AND RUDOLF FUGMANN, OF GUBEN, GERMANY.

BLOWING MACHINE FOR THE MANUFACTURE OF FELTS.

Application filed December 18, 1926, Serial No. 155,749, and in Germany December 9, 1925.

This invention relates to an improved blowing machine for the manufacture of felt.

The main object of the invention is to feed into the machine in the unit of time a larger quantity of material than is possible with the usual machines. This is of special importance if it is necessary to run the machine very slowly as required with certain starting materials. However, the increased efficiency of the machine as realized by the invention is also valuable if the machine is run at normal speed.

According to the invention the blowing machine is provided instead of with a single feeding way or track with a plurality of such feeding tracks. Preferably these feeding tracks which may all be constructed in the same manner are arranged above each other. In this case it has been found sufficient to provide a single wind roller by which the material issuing from each of the feeding tracks is conveyed together into the casing in which the blowing operation takes place.

In order to obtain a uniform distribution of the material within the casing and a uniform deposit upon the cone or other similar member it has been found convenient not to arrange the casing with an open top as hitherto usual but to provide it with a preferably adjustable plate causing a deviation of the current of air, an immediate action, on the material entering the casing, of an air current coming from above and a resulting exaggerated deposit on the upper part of the cone being thus avoided. Such deviating plate may with advantage also be used in machines having only a single feeding track.

In the drawing a constructional form of a blowing machine in accordance with the invention is diagrammatically shown in section but the invention is not limited to the details shown in the drawing and described in the specification but will be defined in the claims appended to this specification.

In the drawing 1 is the first feeding table consisting as usual of transverse lathes 2 fixed on the bands 3 passing over rollers 4. The material placed on this table is seized by feeding rollers 5 and fed to a picker 6. 7 is the usual wind breaking roller consisting of perforated sheet metal or the like.

The material is further moved by the picker 6 to a second feeding table 8 arranged in exactly the same manner as the first table and consisting of lathes 9 fixed on bands 10 which pass over rollers 11. From this second feeding table the material passes to further feeding rollers 12 and a second picker 13. Behind the latter—in the direction of movement—is arranged a wind roller 14 consisting of a drum provided with lathes 15.

Above the feeding track arranged as just described a second feeding track is arranged in the example shown, said track consisting in the same manner of two feeding tables having the necessary feeding rollers, pickers and wind breaking roller. The parts corresponding to those mentioned before are indicated by the reference numerals 1′ to 13′, respectively. Preferably this second track is operated at the same speed as the first track.

In the construction shown no special wind roller is provided for the second feeding track, the current of air produced by the wind roller 14 being sufficient for moving forward the material issuing from both tracks.

In a similar manner a third feeding track can be arranged and, if necessary, even a greater number.

The rollers 4, 4′, 11, 11′, feeding rollers 5, 5′, 12, 12′, pickers 6, 6′, 13, 13′, wind breaking rollers 7, 7′ and wind roller 14 are adapted to be rotated by any convenient driving means not shown.

The current of air produced by the wind roller 14 when the latter is rotated projects the material into the blowing casing 16 as indicated by the arrows. In this casing if the machine is used in the manufacture of hats a rotatable cone 17 consisting of perforated sheet metal or the like is arranged. On this cone the material is deposited in known manner by the action of the current of air produced by the wind roller 14 and an exhauster 18. If the machine is used in the manufacture of goods other than hats instead of the cone a device of correspondingly different shape is used.

It is not absolutely necessary to have the feeding tracks arranged above each other, they may also be arranged in any other convenient manner, for instance diametrically opposite each other and issuing into the casing at the same level.

In the casing 16 a deviating plate 19 is arranged above the cone or the like, said plate being preferably adjustable. The object of this plate is to deviate the current of air in such manner that the material carried

by said current is uniformly deposited and not substantially on the upper part of the cone as it is the case with certain kinds of starting material if no such deviating plate is provided.

What we claim is:—

1. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, and a plurality of material feeding tracks issuing into said casing.

2. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, and a plurality of material feeding tracks issuing into said casing, said tracks being arranged above each other.

3. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, a plurality of material feeding tracks issuing into said casing, said tracks being arranged above each other, and a wind roller common to said tracks.

4. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, and a deviating plate adapted to close the open top of said casing.

5. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, and an adjustable deviating plate adapted to close the open top of said casing.

6. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, a plurality of material feeding tracks issuing into said casing, and a deviating plate adapted to close the open top of said casing.

7. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, a plurality of material feeding tracks issuing into said casing, said tracks being arranged above each other, and a deviating plate adapted to close the open top of said casing.

8. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, a plurality of material feeding tracks issuing into said casing, said tracks being arranged above each other, a wind roller common to said tracks, and a deviating plate adapted to close the open top of said casing.

9. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, a plurality of material feeding tracks issuing into said casing, and an adjustable deviating plate adapted to close the open top of said casing.

10. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, a plurality of material feeding tracks issuing into said casing, said tracks being arranged above each other, and an adjustable deviating plate adapted to close the open top of said casing.

11. In a blowing machine for manufacturing felt the combination of a casing, a perforated member arranged therein and on which member the material under treatment is deposited, means for passing through said casing and member a current of air for conveying the said material, a plurality of material feeding tracks issuing into said casing, said tracks being arranged above each other, a wind roller common to said tracks, and an adjustable deviating plate adapted to close the open top of said casing.

In testimony whereof we have affixed our signatures.

EMIL BRECHT.
RUDOLF FUGMANN.