

H. S. HAWLEY & J. W. PALMER.
SPINNING MACHINE ATTACHMENT.
APPLICATION FILED NOV. 26, 1910.

1,008,144.

Patented Nov. 7, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

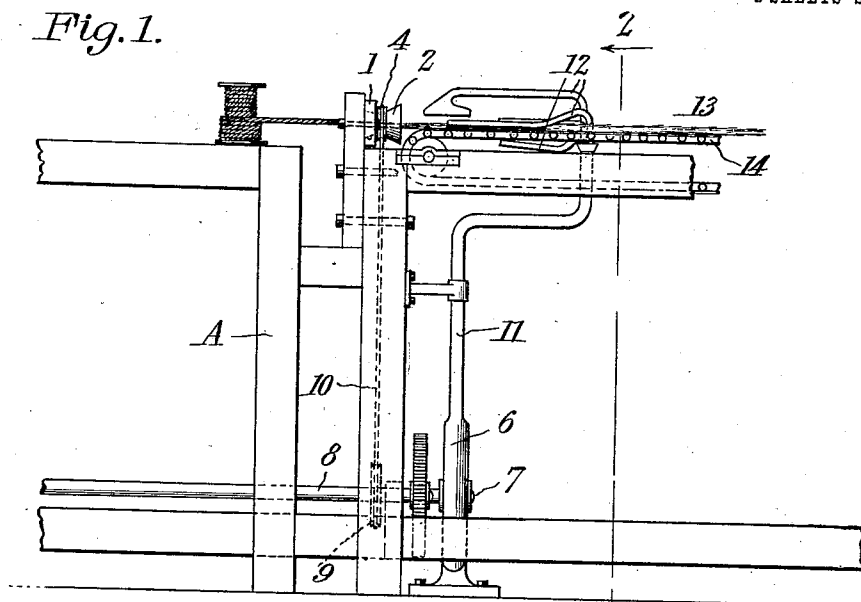
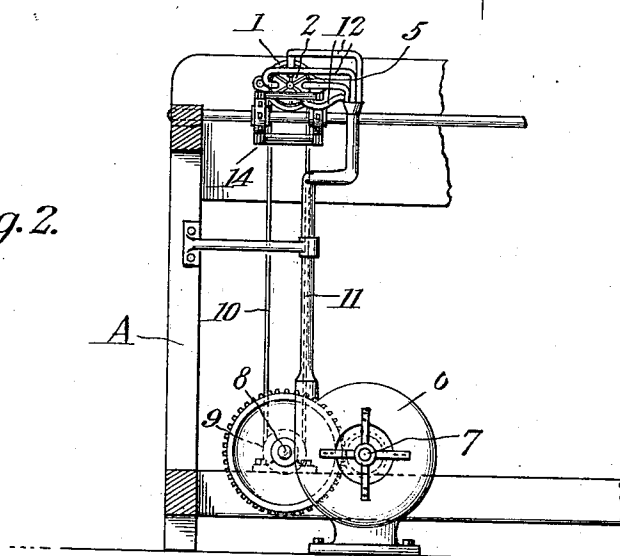


Fig. 2.



Witnesses

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2 SHEETS-SHEET 2.

Fig. 3.

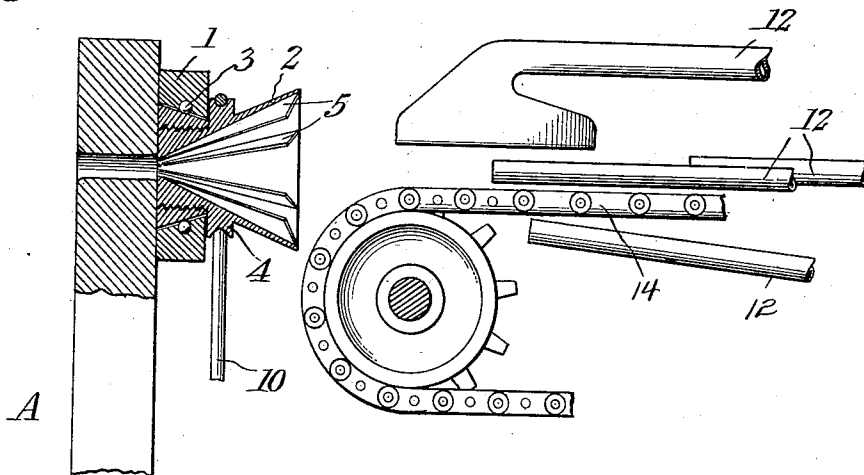


Fig. 4.

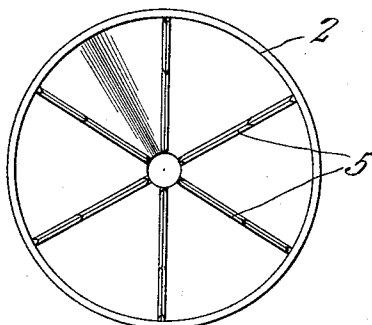
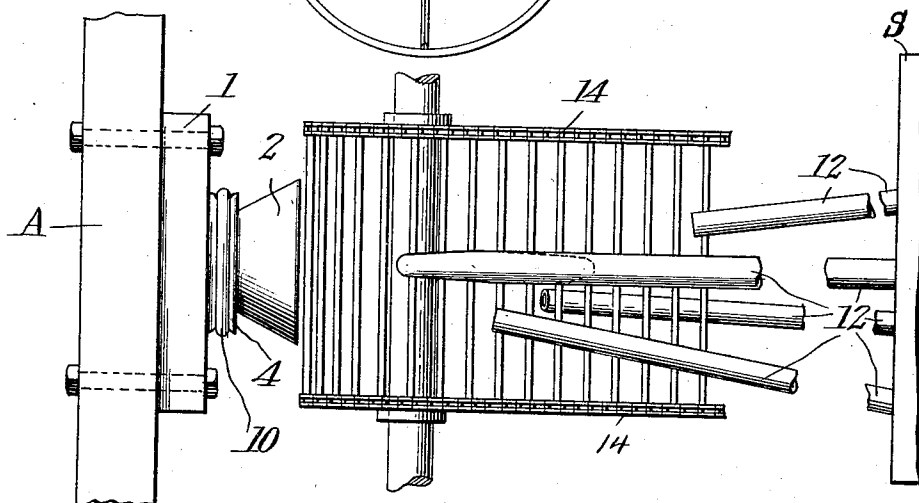


Fig. 5.



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HOWARD S. HAWLEY AND JAMES W. PALMER, OF JACKSON, MICHIGAN.

SPINNING-MACHINE ATTACHMENT.

1,008,144.

Specification of Letters Patent.

Patented Nov. 7, 1911.

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To all whom it may concern:

Be it known that we, HOWARD S. HAWLEY and JAMES W. PALMER, citizens of the United States of America, residing at Jackson, in the county of Jackson and State of Michigan, have invented new and useful Improvements in Spinning-Machine Attachments, of which the following is a specification.

10 This invention relates to machines for spinning sisal and other fiber in the manufacture of binder twine and the like, and it has particular reference to the condensing trumpet or condensing bell, as it is variously
15 termed, and the parts coöperating therewith.

The particular object of the invention is to improve and facilitate the feeding of the sliver to the trumpet.

20 A further object of the invention is to mount the trumpet for rotation in such a manner that the sliver will be partly twisted as it issues therefrom.

25 With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

30 In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the claims may be resorted to when desired.

35 In the drawing,—Figure 1 is a side elevation of a spinning frame illustrating the invention. Fig. 2 is a vertical sectional view taken on the line 2—2 in Fig. 1. Fig. 3 is a sectional view enlarged taken through the trumpet and adjacent parts. Fig. 4 is a front view of the trumpet. Fig. 5 is a top
45 plan view of the trumpet and adjacent parts.

Corresponding parts in the several figures are denoted by like characters of reference.

50 The frame structure A supports a suitably constructed collar 1 which constitutes a bearing for the revolving condensing trumpet 2. Anti-friction balls may be used in said bearing, as shown at 3, to facilitate the operation. The bell-shaped trumpet 2 is formed with a band pulley 4, and in the
55 mouth of said trumpet are disposed a plu-

60 rality of flat blades 5, said blades being tapered from the mouth to the throat of the trumpet upon the interior surface of which the said blades are longitudinally disposed and equidistantly spaced. The frame structure supports the casing 6 of a blower of ordinary construction, said blower being mounted upon a shaft 7 which may be driven by power derived from any suitable source. The shaft 7 is geared to a counter shaft 8
65 carrying a band wheel 9 which is connected by a band 10 with the pulley 4 upon the trumpet 2, which latter will thus be driven. If desired, motion may be transmitted from the shaft 7 to the trumpet direct without
70 the use of intermediate gearing. From the mouth of the blower casing a pipe or duct 11 extends upwardly, said duct being provided with a plurality of branches 12 which are suitably disposed in such a manner as
75 to discharge an air current downwardly and laterally in the direction of the sliver, which is indicated at 13, as it is being carried by the chain or feeding device 14 in the direction of the trumpet. The sliver is thus com-
80 packed or condensed before it enters the trumpet, and as it is being engaged by the trumpet, the blades disposed interiorly upon said trumpet will engage the sliver and subject the latter to a preliminary twisting be-
85 fore it issues from the trumpet.

It is desired to be understood that instead of providing a blower in connection with each machine a single blower may be made to serve several machines. It will also be
90 regarded as being within the scope of the invention to dispense with the blowers altogether and to provide the air under pressure needed for any desired number of machines from a single suitably located reservoir or storage chamber, as indicated at S in
95 Fig. 5 in which the air may be compressed by any suitable well known means.

100 The construction of the improved device as will be seen is very simple. The invention is capable of being readily applied to spinning machinery of ordinary well known construction, and it has been found in actual practice to be thoroughly efficient for the purposes for which it is provided.
105

Having thus described the invention, what is claimed as new, is:—

1. In a device of the character described, a condensing trumpet supported for rotation, means for feeding the sliver to the
110

trumpet, and means for directing a current of air under pressure upon the sliver as it approaches the trumpet.

2. In a device of the character described,
5 a condensing trumpet supported for rotation, a blower casing, a fan carrying shaft, means for transmitting motion from the fan carrying shaft to the revolving trumpet, and means for conveying a current of air under
10 pressure and for discharging such current upon the sliver as it approaches the trumpet.

3. In a device of the character described, a condensing trumpet supported for rotation,

a blower including a casing, a duct leading from the outlet of the blower casing, and a 15 plurality of branches connected with said duct and arranged to discharge downwardly and laterally in front of the mouth of the trumpet.

In testimony whereof we affix our signatures in presence of two witnesses.

HOWARD S. HAWLEY.

JAMES W. PALMER.

Witnesses:

ARTHUR L. PALMER,

ARTHUR W. HERBST.

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