

No. 857,427.

PATENTED JUNE 18, 1907.

W. H. WALDRON.
STICK FEEDER.

APPLICATION FILED MAR. 9, 1907.

Fig. 2.

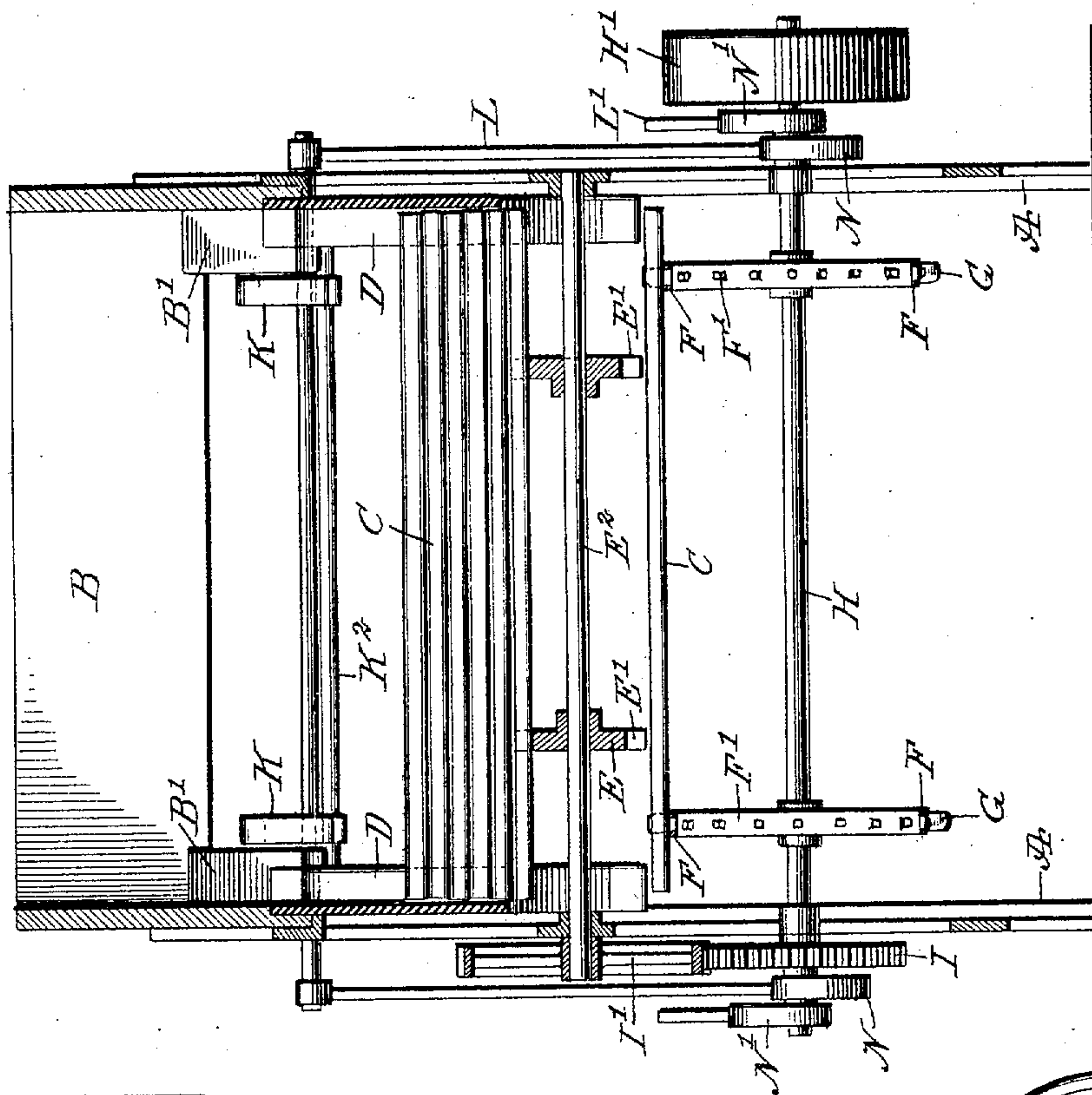
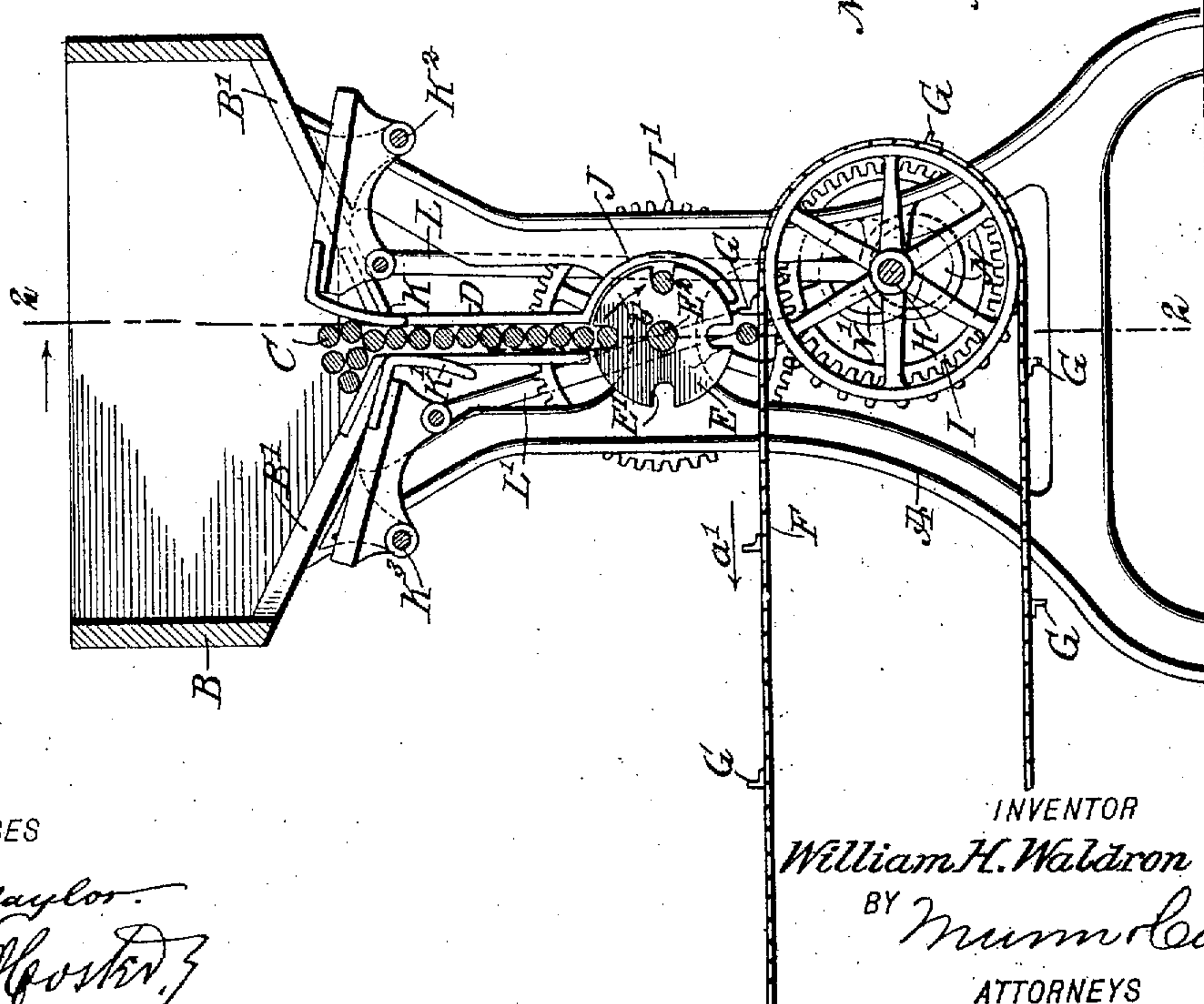


Fig. 1.



WITNESSES

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WILLIAM HUBELI WALDRON, OF NEW BRUNSWICK, NEW JERSEY, ASSIGNOR
TO JOHN WALDRON COMPANY, OF NEW BRUNSWICK, NEW JERSEY.

STICK-FEEDER.

No. 857,427.

Specification of Letters Patent.

Patented June 18, 1907.

Application filed March 9, 1907. Serial No. 361,450.

To all whom it may concern:

Be it known that I, WILLIAM HUBELI WALDRON, a citizen of the United States, and a resident of New Brunswick, in the county of Middlesex and State of New Jersey, have
5 invented a new and Improved Stick-Feeder, of which the following is a full, clear, and exact description.

The invention relates to drying machines
10 such as are used in the manufacture of wall paper and the like, and its object is to provide a new and improved stick feeder, arranged to insure a positive and accurate feeding of the sticks onto an endless carrier
15 which delivers the sticks to the drying machine for receiving and supporting the freshly printed or coated paper or other webbing.

The invention consists of novel features
20 and parts and combinations of the same, which will be more fully described herein-after and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings
25 forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the views.

Figure 1 is a sectional side elevation of the improvement, and Fig. 2 is a transverse section of the same on the line 2—2 of Fig. 1.
30

On the upper end of a suitably constructed frame A is mounted a hopper B, open at the bottom and provided near its ends with inclined guides B', so that the stick C contained in the hopper B can readily pass to
35 the lower spaced ends of the guides B', to then pass singly into the vertically disposed delivery chute D, secured to or formed on the sides of the main frame A, as plainly indicated in the drawings. The lowermost of
40 the sticks C in the delivery chute D is adapted to pass into one set of transversely alined notches E' formed in the peripheral surfaces of spacing wheels E, secured on a shaft E²,
45 arranged transversely and journaled in suitable bearings on the main frame A. The spacing wheels E deliver the sticks singly at stated intervals onto the endless carrier F in the form of endless sprocket chains, and provided with lugs or projections G, for carrying
50 the sticks singly along to the drying machine for receiving the paper or other webbing to be supported by the sticks in folds for drying purposes. The endless carrier chains F pass

over the sprocket wheels F' secured on a
55 transversely extending shaft H journaled on the main frame A, and on one end of the said shaft H is secured a pulley H' connected by a belt with other machinery, for imparting a continuous rotary motion to the shaft H and
60 to the sprocket wheels F', to cause the endless carrier chains F to travel in the direction of the arrow a'. On the shaft H is secured a gear wheel I in mesh with a gear wheel I' attached to the shaft E² of the spacing wheels
65 E, so that when the shaft H is rotated, a rotary motion is given to the shaft E², to cause the spacing wheels to rotate in unison with the travel given to the endless carrier chains F. A guard or hood J is arranged on the delivery side of the spacing wheels E, to prevent
70 the sticks from falling out of the notches E' during the time the sticks are carried by the said spacing wheels E from the top thereof to the bottom of the wheels.
75

Now the arrangement is such that when a set of notches E' reaches a bottom position, then the stick in the said notches drops down onto the carrier chains F immediately in front of the corresponding set of transversely
80 alined lugs G, for carrying the stick forward on the forward travel of the carrier chains F.

In order to prevent the stick C from becoming wedged at the junction of the hopper guides B' and the delivery chute D, agitating
85 arms K and K' are provided, adapted to alternately swing up and down on opposite sides of the sticks at the junction of the guides B' with the delivery chute D, as indicated in the drawings.
90

The arms K and K' are segmental and are fulcrumed at K² and K³ on the main frame A, and the said guides are connected with the eccentric rods L and L' and eccentrics N and N', secured on the shaft H, so that when the
95 latter is rotated, the said arms K and K' are caused to swing alternately up and down on opposite sides of the sticks C, so as to prevent the same from wedging or clogging at the junction of the guides B' with the delivery chute D.
100

The oppositely disposed arms K and K' are spaced apart about the thickness of a stick, and hence when the machine is running, the arms K, K' in swinging up and down on
105 opposite sides of the sticks C, do not allow more than one stick to pass down into the delivery chute D, and hence the sticks are

ranged one on top of the other and thus readily travel downward in the chute D by their gravity, without danger of clogging.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A stick feeder comprising an endless carrier, a revoluble spacing device for delivering the sticks to the said carrier, a delivery chute containing the sticks one on top of the other, and delivering the lowermost stick to the said spacing device, a hopper for containing the sticks, and into the bottom of which opens the upper end of the said chute, and agitating means for engaging the sticks on each side of the delivery chute at the junction of the said delivery chute with the said hopper.

2. A stick feeder comprising an endless carrier, a revoluble spacing device for delivering the sticks to the said carrier, a delivery chute containing the sticks one on top of the other, and delivering the lowermost stick to the said spacing device, a hopper for containing the sticks and into the bottom of which opens the upper end of the said chute, and up and down agitating arms engaging the stick at the junction of the said delivery chute with the said hopper.

3. A stick feeder comprising an endless carrier, a revoluble spacing device for delivering the sticks to the said carrier, a de-

livery chute containing the sticks one on top of the other, and delivering the lowermost stick to the said spacing device, a hopper for containing the sticks and into the bottom of which opens the upper end of the said chute, up and down agitating arms engaging the stick at the junction of the said delivery chute with the said hopper, and means actuated from the said endless carrier and connected with the said arms for alternately imparting an up and down agitating motion to the same.

4. A stick feeder provided with a hopper for containing the sticks, a delivery chute leading from the bottom of the said hopper, and agitating means engaging the sticks on each side of the delivery chute at the junction of the said hopper therewith.

5. A stick feeder provided with a hopper for containing the sticks, a delivery chute leading from the bottom of the said hopper, agitating arms for engaging the sticks at the said delivery chute and hopper, and means for alternately imparting an up and down swinging motion to the said arms.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM HUBELI WALDRON.

Witnesses:

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W. E. VAN DEVENTER.