

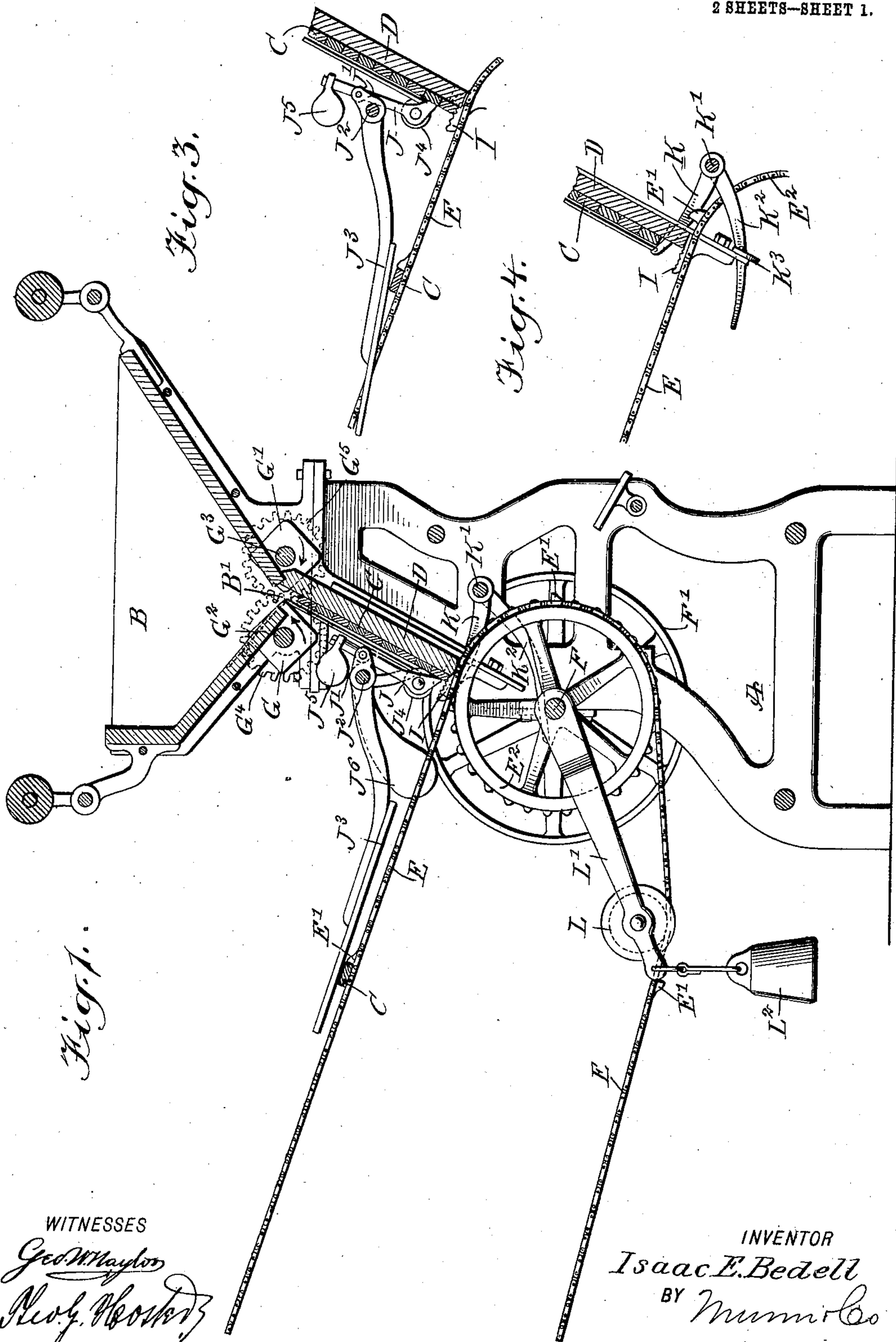
No. 861,077.

PATENTED JULY 23, 1907.

I. E. BEDELL.
STICK FEEDER.

APPLICATION FILED APR. 16, 1907.

2 SHEETS—SHEET 1.



WITNESSES
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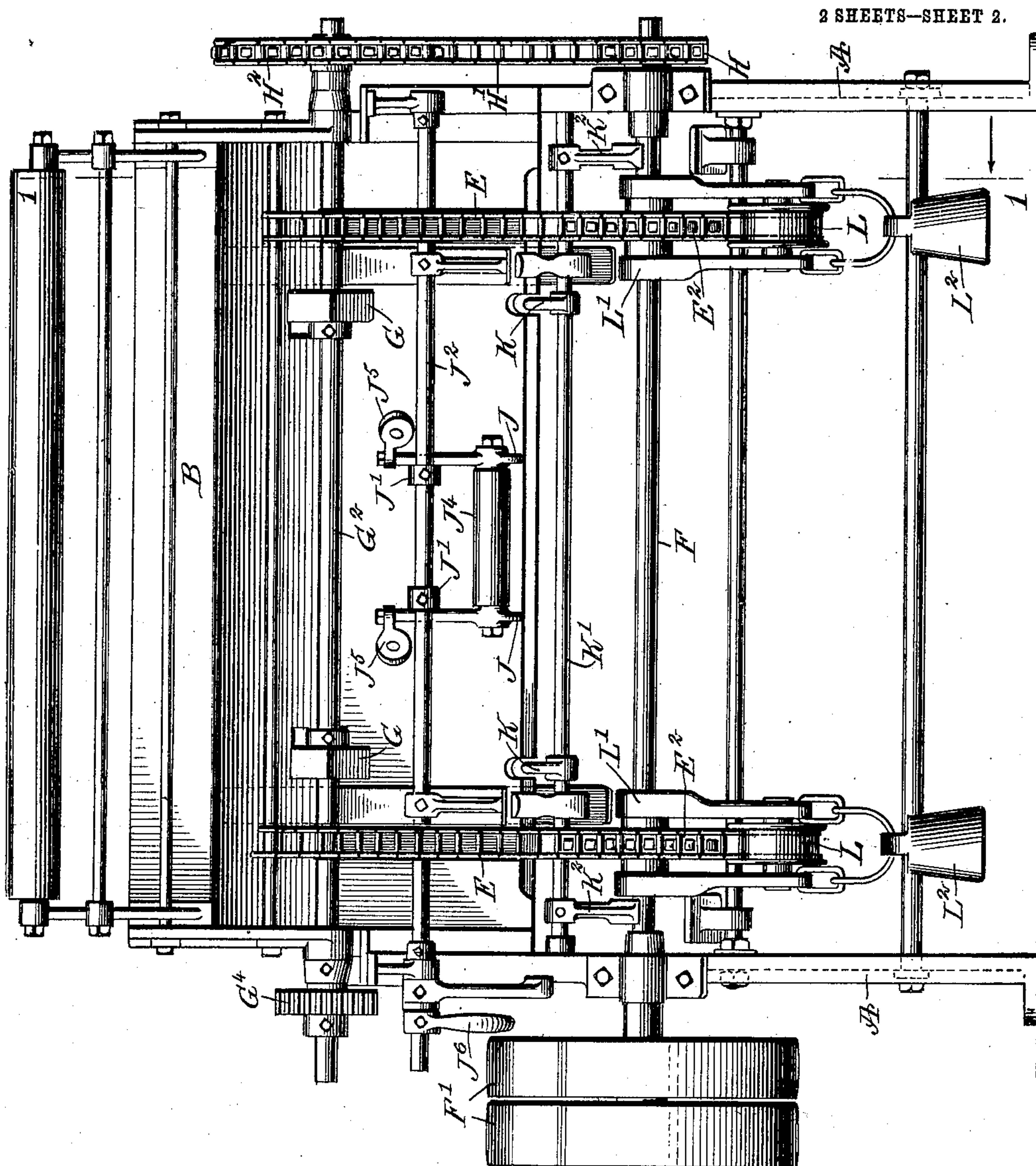


Fig. 2.

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UNITED STATES PATENT OFFICE.

ISAAC ELISHA BEDELL, OF YORK, PENNSYLVANIA, ASSIGNOR TO JOHN WALDRON COMPANY,
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STICK-FEEDER.

No. 861,077.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed April 16, 1907. Serial No. 368,511.

To all whom it may concern:

Be it known that I, ISAAC ELISHA BEDELL, a citizen of the United States, and a resident of York, in the county of York and State of Pennsylvania, have invented a new and Improved Stick-Feeder, of which the following is a full, clear, and exact description.

The invention relates to drying machines for wall paper and the like, and its object is to provide a new and improved stick feeder, arranged to feed flat sticks singly and accurately spaced apart onto an endless carrier, without danger of the sticks being wedged or clogged in the machine or broken or irregularly placed in position on the carrier.

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

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

Figure 1 is a sectional side elevation of the improvement on the line 1—1 of Fig. 2, Fig. 2 is a front end elevation of the same. Fig. 3 is a sectional side elevation of the improvement and showing more particularly the stick retaining device in a different position; and Fig. 4 is a sectional side elevation of the manually controlled device for holding the sticks in a raised inactive position.

On the top of a suitably constructed frame A is arranged a hopper B for containing the flat sticks or slats C adapted to pass singly from the outlet B' of the hopper B to a guideway or chute D, for delivering the sticks to an endless carrier E, preferably in the form of sprocket chains, having spaced pairs of lugs E' and passing over sprocket wheels E² secured on the main shaft F journaled on the frame A. The shaft F is provided with fast and loose pulleys F' (see Fig. 2), connected by belt with other machinery for imparting a continuous rotary motion to the main shaft F.

The sticks C are agitated at the junction of the hopper outlet B' with the upper end of the guideway D, to prevent wedging or clogging of the sticks and to insure a proper passage of the sticks down the guideway D, one edgewise on top of the other, as illustrated in Fig. 1. For the purpose mentioned revoluble agitators G, G' are provided in the form of polygonal blocks or cams on opposite sides of the outlet B' and projecting in slots in the sides of the hopper B and the guideway D, to lift the sticks in the hopper adjacent to the opposite sides of the outlet B', to cause one stick only to pass at a time between the agitators G, G' and through the outlet B' into the guideway D.

The agitators G, G' are secured to transversely extending shafts G², G³ journaled on the main frame A, and connected with each other by meshing gear wheels G⁴, G⁵, so that the agitators rotate in unison with each

other and in the direction of the arrows shown in Fig. 1. The shaft G² carrying the agitators G is driven from the main shaft F, and for this purpose the shaft F is provided with a sprocket wheel H connected by a sprocket chain H' with a sprocket wheel H² secured on the shaft G². Thus when the machine is running and the carrier E is traveling, then a rotary motion is given to the agitators G, G' to insure the proper passage of the sticks C from the hopper B into and down the guideway D.

The lowermost stick C rests on the upper serrated edges of brackets I adjustably secured to the main frame A, and the lowermost stick C in the guideway D is engaged by arms J pivotally connected with arms J', secured to a shaft J² journaled in suitable bearings arranged on the main frame A. On the shaft J² are mounted forwardly projecting arms J³ extending over a forwardly traveling stick C, see Fig. 3, for the latter to impart a slight swinging motion to the arms J³, to rock the shaft J² with a view to move the arms J up or down, that is, to release the lower stick C on the guideway D, immediately previous to a pair of lugs E' engaging the lowermost stick and pushing the same from under the arms J and over the brackets I, to be finally moved onto the sprocket chains of the endless carrier E, to be carried along by the corresponding pair of lugs E'.

The releasing and retaining arms J are provided near their lower ends with a transversely extending friction roller J⁴ adapted to rest on the front faces of the lowermost sticks C held in the guideway D, to prevent the sticks from doubling up at a time the lowermost stick is pushed out by the corresponding lug E'. The upper ends of the arms J are provided with weights J⁵, to hold the lower ends of the arms in contact with the lowermost stick.

One outer end of the shaft J² is provided with a weight J⁶, to hold the arms J³ down in contact with the endless carrier E and the sticks C on the said carrier.

The lowermost stick C is adapted to engage arms K secured on a shaft K' journaled on the main frame A, and on the said shaft K' is secured a handle K² under the control of the operator for imparting a turning motion to the shaft K' and an upward swinging motion to the arms K for the latter to lift the sticks C on the guideway D whenever it is desired to run the machine empty that is without feeding the sticks C into the carrier. The handle K² is adapted to be locked in a raised position by a suitable turn button K³ or other fastening device, see Fig. 4.

In order to give the desired tension to the sprocket wheels forming the endless carrier E, suitable tightening pulleys L are provided engaging the lowermost runs of the sprocket wheels at the inside thereof, the said tightening pulleys being journaled on arms L' hung loosely on the shaft F and provided with weights L², as illustrated in the drawings.

The operation is as follows: When the machine is running then a simultaneous traveling motion is given to the carrier E and a rotary motion to the agitators G, G', so that the sticks C contained in the hopper B are caused to pass down the chute or guideway D, one on top of the other, until the lowermost stick reaches the brackets I and is engaged at its outer face by the arms J. Now immediately previous to the next or following pair of lugs E' coming in contact with the lowermost stick C, the arms J are raised by the action of a forwardly traveling stick on the carrier E, so that the lowermost stick C is released by the arms J, and the lugs E' now can readily push the lowermost stick C out of the guideway, to move the stick over the brackets I until the stick finally passes onto the endless carrier E to be thus carried along by the lugs E'. During the removal of the lowermost stick C as above described, the next stick above is held in place by the arms J and friction roller J⁴, and when the arms J³ are raised by the forwardly traveling stick C on the carrier E, then the sticks on the guideway D are released by the arms J to allow the sticks to descend until the lowermost one rests on the bracket I.

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

1. A stick feeder provided with a hopper for containing the sticks and having an outlet for the sticks to pass singly one after the other, and revoluble agitators on opposite sides of the said outlet for agitating the sticks in the bottom of the hopper and insuring the passage of the sticks singly from the hopper into the outlet.
2. A stick feeder provided with a hopper for containing the sticks and having an outlet for the sticks to pass singly one after the other, revoluble agitators on opposite sides of the said outlet for agitating the sticks in the bottom of the hopper and insuring the passage of the sticks singly from the hopper into the outlet, a guideway leading from the said outlet, and an endless carrier for receiving the sticks from the lower end of the guideway, and a retaining device for temporarily holding the sticks on the guideway and controlled by the sticks on the carrier, to periodically release the sticks on the guideway and allow the lowermost stick to pass onto the said carrier.

3. A stick feeder provided with a guideway for the passage of the sticks, an endless carrier for receiving the sticks periodically from the said guideway, and a retaining and releasing device for temporarily holding the sticks in place on the guideway and controlled by the sticks on the carrier.

4. A stick feeder provided with a guideway for the passage of the sticks, an endless carrier for receiving the sticks periodically from the said guideway, the said carrier having spaced pairs of lugs, rests for the lowermost stick to rest on, and a retaining and releasing device for the sticks, the said device having retaining arms and a lever connected with the said retaining arms, the lever extending over the carrier to be actuated by the sticks thereon, the said lugs in engaging the lowermost slat moving the latter over the rest and under the ends of the said retaining arms.

5. A stick feeder provided with a guideway for the passage of the sticks, an endless carrier for receiving the sticks periodically from the said guideway, the said carrier having spaced pairs of lugs, rests for the lowermost stick to rest on, a retaining and releasing device for the sticks, the said device having retaining arms and a lever connected with the said retaining arms, the lever extending over the carrier to be actuated by the sticks thereon, the said lugs in engaging the lowermost slat moving the latter over the rest and under the ends of the said retaining arms, and a roller carried by the said retaining arms, and resting against the sticks on the said guideway.

6. A stick feeder provided with a hopper for containing the sticks and having an outlet for the sticks to pass singly one after the other, revoluble agitators on opposite sides of the said outlet for agitating the sticks in the bottom of the hopper and insuring the passage of the sticks singly from the hopper into the outlet, a guideway leading from the said outlet, an endless carrier having lugs for engagement with the lowermost stick on the guideway, a retaining and releasing device for the lowermost stick, and means for driving the said agitators from the said endless carrier.

7. A stick feeder provided with a guideway for the sticks to slide on, one on top of the other, and a manually-controlled device for raising the sticks in the said guideway.

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

Witnesses:

D. S. TOVELL,
E. MERNER.