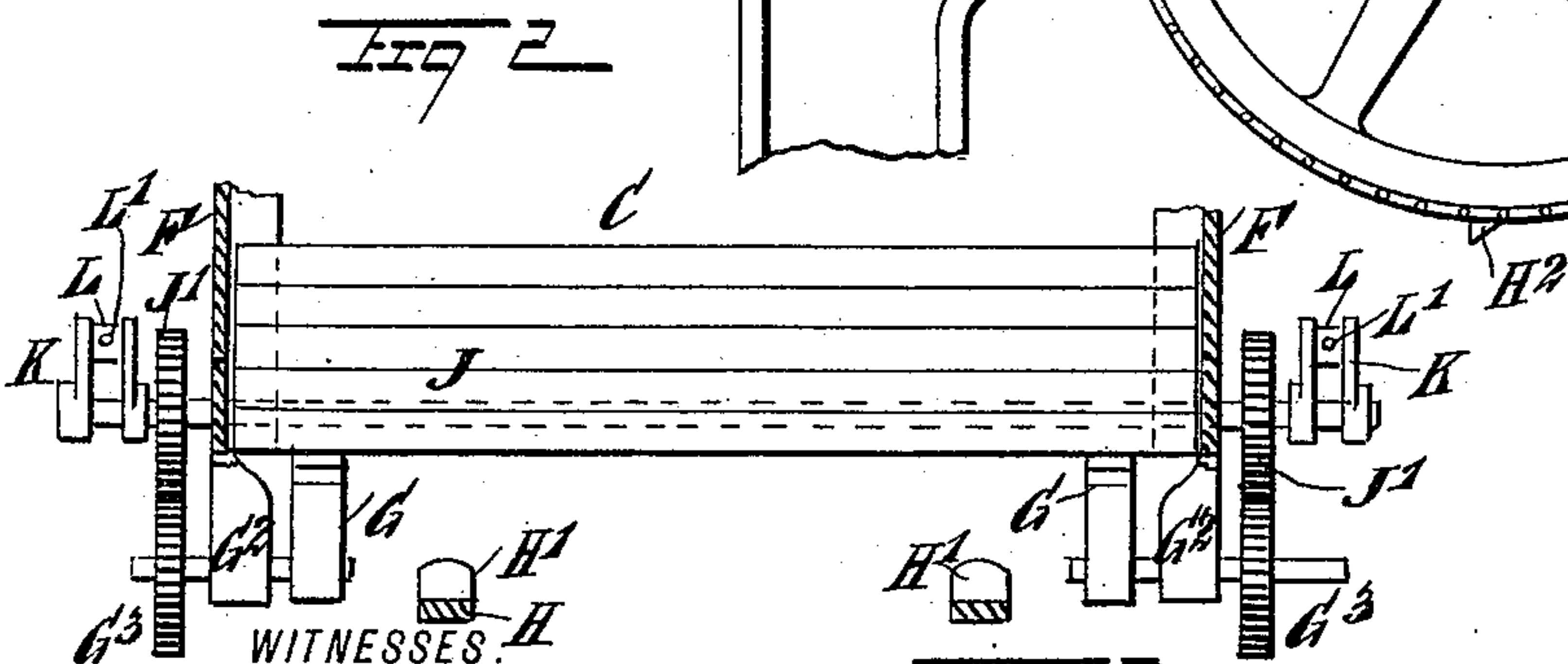
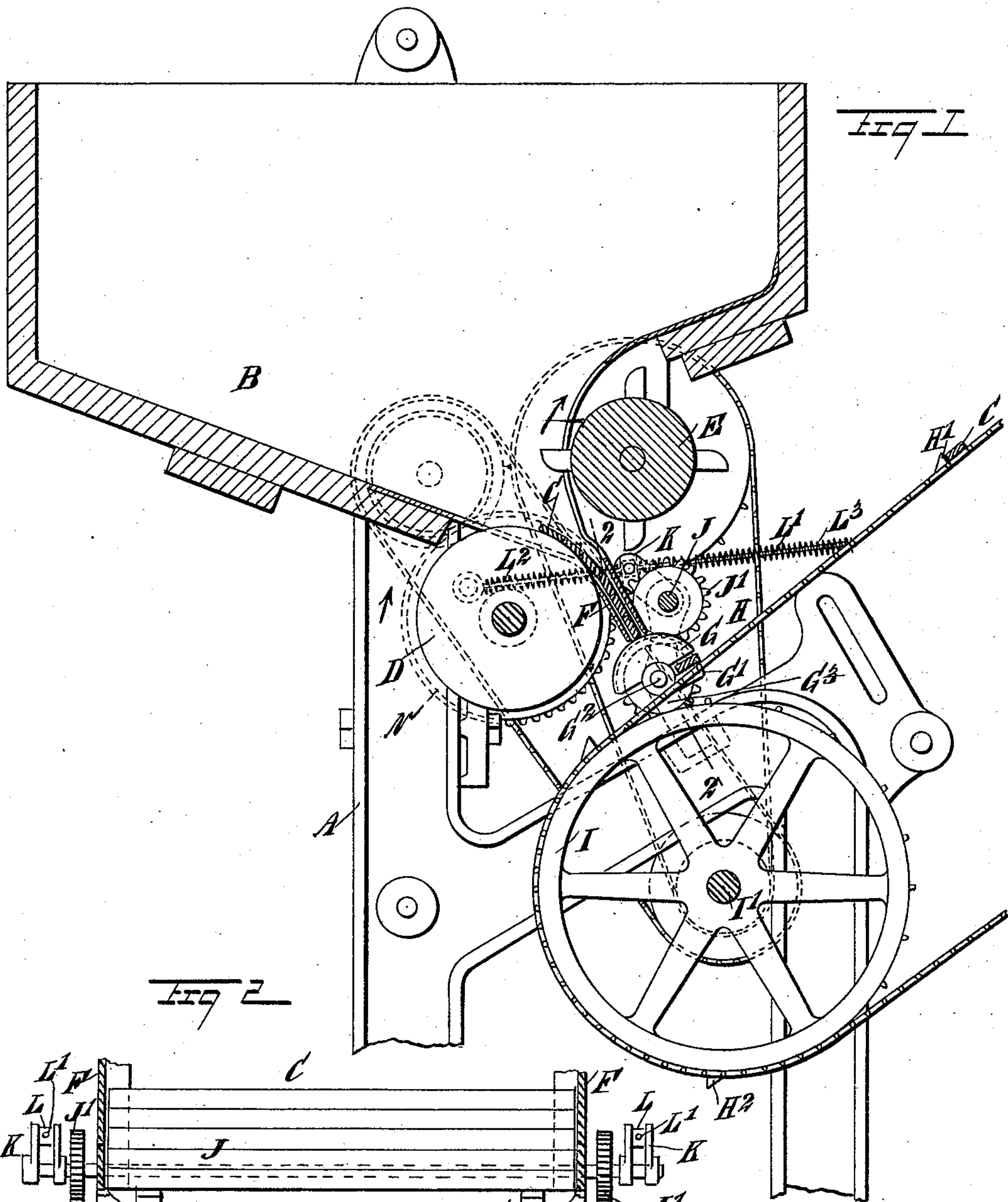


(No Model.)

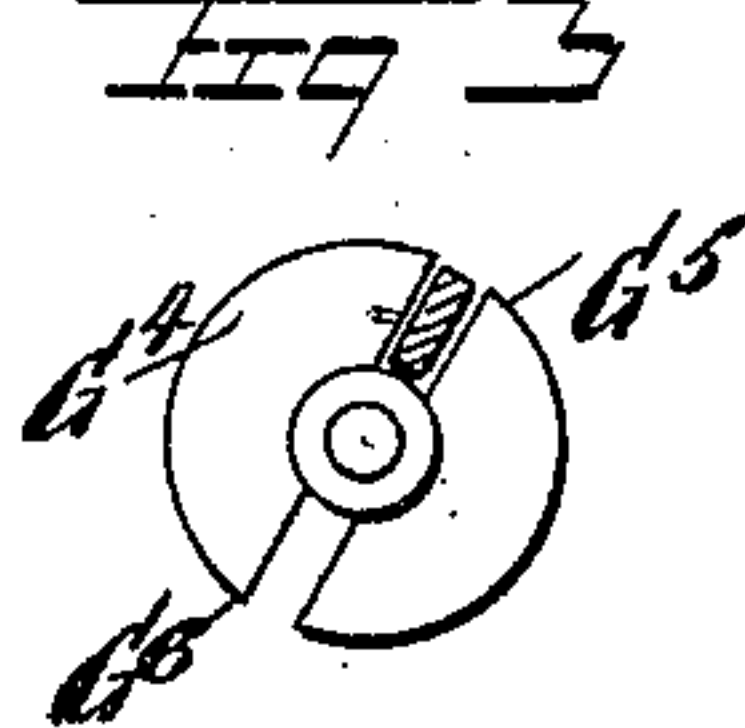
W. H. WALDRON. *Carriers*
LATH FEEDER FOR PAPER DRIERS.

No. 574,692.

Patented Jan. 5, 1897.



WITNESSES.
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UNITED STATES PATENT OFFICE.

WILLIAM H. WALDRON, OF NEW BRUNSWICK, NEW JERSEY.

LATH-FEEDER FOR PAPER-DRIERS.

SPECIFICATION forming part of Letters Patent No. 574,692, dated January 5, 1897.

Application filed December 20, 1895. Serial No. 572,784. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WALDRON, of New Brunswick, in the county of Middlesex and State of New Jersey, have invented a new and Improved Lath-Feeder for Paper-Carriers, of which the following is a full, clear, and exact description.

The invention relates to lath-feeders for paper-carriers, such as shown and described in the Letters Patent of the United States No. 514,794, granted to me on February 13, 1894.

The object of the present invention is to provide a new and improved lath-feeder arranged to insure a positive delivery of a single lath at a time from the feed-chute to the carrier-chains.

The invention consists principally of a carrier mounted to turn and adapted to carry one lath at a time from the chute to the carrier-chain.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement as applied. Fig. 2 is a cross-section of the same on the line 2 2 of Fig. 1, and Fig. 3 is a sectional side elevation of a modified form of carrier.

The improved lath-feeder for paper-carriers is provided with a suitably-constructed frame A, supporting a lath-feeding hopper B, into which the laths C are promiscuously thrown, to be arranged in single file at the lower end of the hopper B by a cylinder D and a feed-regulating wheel E, both rotating in the same direction, the wheel E serving to hold the lath back, so as to permit a single lath to pass into the chute F, arranged on the inside of the sides of the frame A.

The lower end of the chutes F discharge upon carriers G, each provided with a radial slot or notch G', adapted to receive in the lath leaving the chutes F and carry said lath to the carrier chains or belts H, provided with fingers or locks H' for moving the lath upward to permit the paper or fabric to be looped upon

the corresponding lath in the usual manner. The carrier chains or belts H pass over sprocket-wheels I, secured on a transversely-extending shaft I', journaled in suitable bearings attached to the main frame A and driven from suitable machinery forming part of the general machine.

Each carrier G is made in the form of a segment with its peripheral surface in engagement with the lower edge of the lowermost lath in the chutes F, so that the lath is held in place in the chutes until the carriers turn and bring the notches G' in alinement with the lowermost lath, so that this lath passes into the notches G', and the turning of the carriers in a downward direction moves this lath from the chutes to the carrier-chain H to be engaged thereon by the hooks or fingers H', which push the lath out of the notches G' and carry the same upward, as previously described.

Each carrier G has an oscillating motion, and for this purpose is mounted on a transversely-extending short shaft G², journaled in suitable bearings arranged on the frame A at the lower end of the chutes F, and on the outer end of each shaft G² is secured a gear-wheel G³ in mesh with a gear-wheel J', secured on a transversely-extending shaft journaled in suitable bearings, said shaft carrying both gear-wheels J', as plainly shown in Fig. 2, so that an oscillating motion is simultaneously given to both carriers.

On one outer end of the shaft J are secured crank-arms K, in which is fitted a block L, through which passes a rod L', pivotally connected with a crank-disk N, held on the shaft for the cylinder D and rotating with the latter. On the rod L' and on the opposite sides of the block L are coiled springs L² L³ for imparting a swinging motion to the crank-arms K, so as to turn the shaft J forward and backward to impart the turning motion in a like direction to the carriers G, so as to carry a lath from the lower end of the chute F to the carrier-chain H, as previously explained. By the use of the springs L² L³ a yielding motion is given to the crank-arms K, so as to insure a proper delivery of the lath.

Instead of employing oscillating carriers G, I may employ carriers G⁴, (see Fig. 3,) mount-

ed to rotate and provided with diametrically-
arranged slots G^5 and G^6 , so that upon every
half-revolution one of the slots engages a lath
and carries it to the carrier-chains H, as pre-
5 viously explained. The movement given to
the carriers G^4 is preferably intermittent, so
as to insure a proper taking up of the lath
and delivery of the same to the chains H'.

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

1. A device of the class described, provided
with an oscillating carrier adapted to carry
one lath at a time from the chute to the car-
15 rier-chain, substantially as shown and de-
scribed.

2. In a lath-feeder, the combination of a de-
livery-chute having an outlet-opening accom-
modating only a single lath, of a lath-carrier
20 mounted to turn and having a plain rounded
surface normally closing the outlet of the
chute and sustaining the laths in single suc-
cession in the chute, the carrier further hav-
ing lath-receiving slots approximately equal
25 in size to the chute-outlet, and movable to

and from the latter as the carrier is moved on
its axis, substantially as described.

3. In a device of the class described, the
combination with a delivery-chute for the
lath and an oscillating carrier-chain adapted 30
to receive the lath, of a segmental carrier
mounted to oscillate and formed with a radial
slot or notch, said carrier holding said lath
normally in place in the delivery-chute, sub-
stantially as shown and described. 35

4. In a device of the class described, the
combination with a delivery-chute for the
lath and a carrier-chain adapted to receive the
lath, of carriers mounted to turn and arranged
between said chute and carrier-chain, to feed 40
the lath singly to the latter, and means for
imparting a motion to said carrier, said means
including a spring acting to relieve the carrier
of sudden movement by its said actuating
means, substantially as shown and described. 45

WILLIAM H. WALDRON.

Witnesses:

W. EDWIN FLORANCE,
WALTER I. ANTIN.