No. 666,384.

Patented Jan. 22, 1901.

J. KASMEIER.

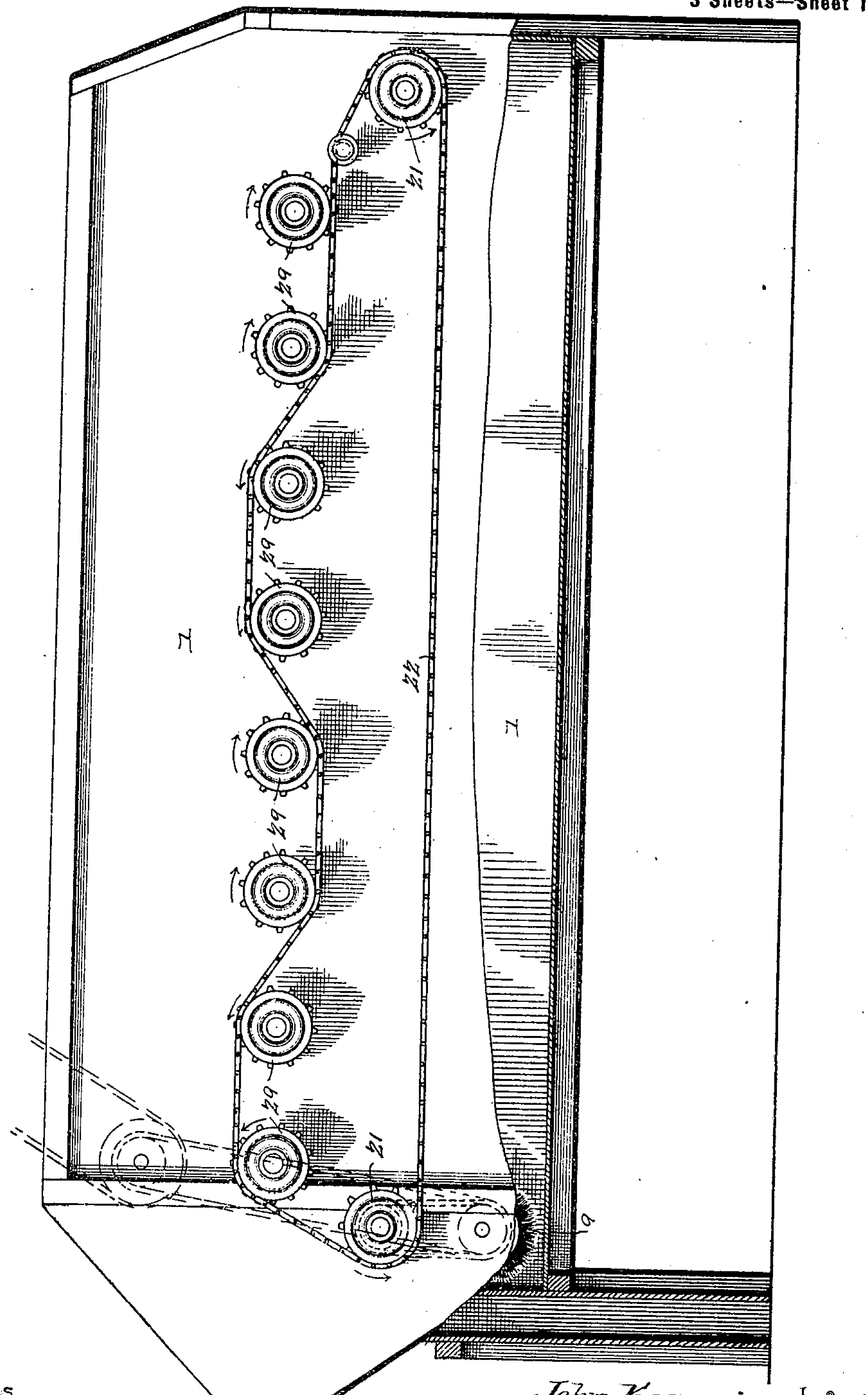
DELINTING MACHINE.

(Application filed Apr. 24, 1900.)

(No Model.)

3 Sheets—Sheet 1.

Fig. 1.



Witnesses

E. K. Stewart.

J. W. Garner

John Kasmeier Inventor

By his Attorneys.

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 666,384.

Patented Jan. 22, 1901.

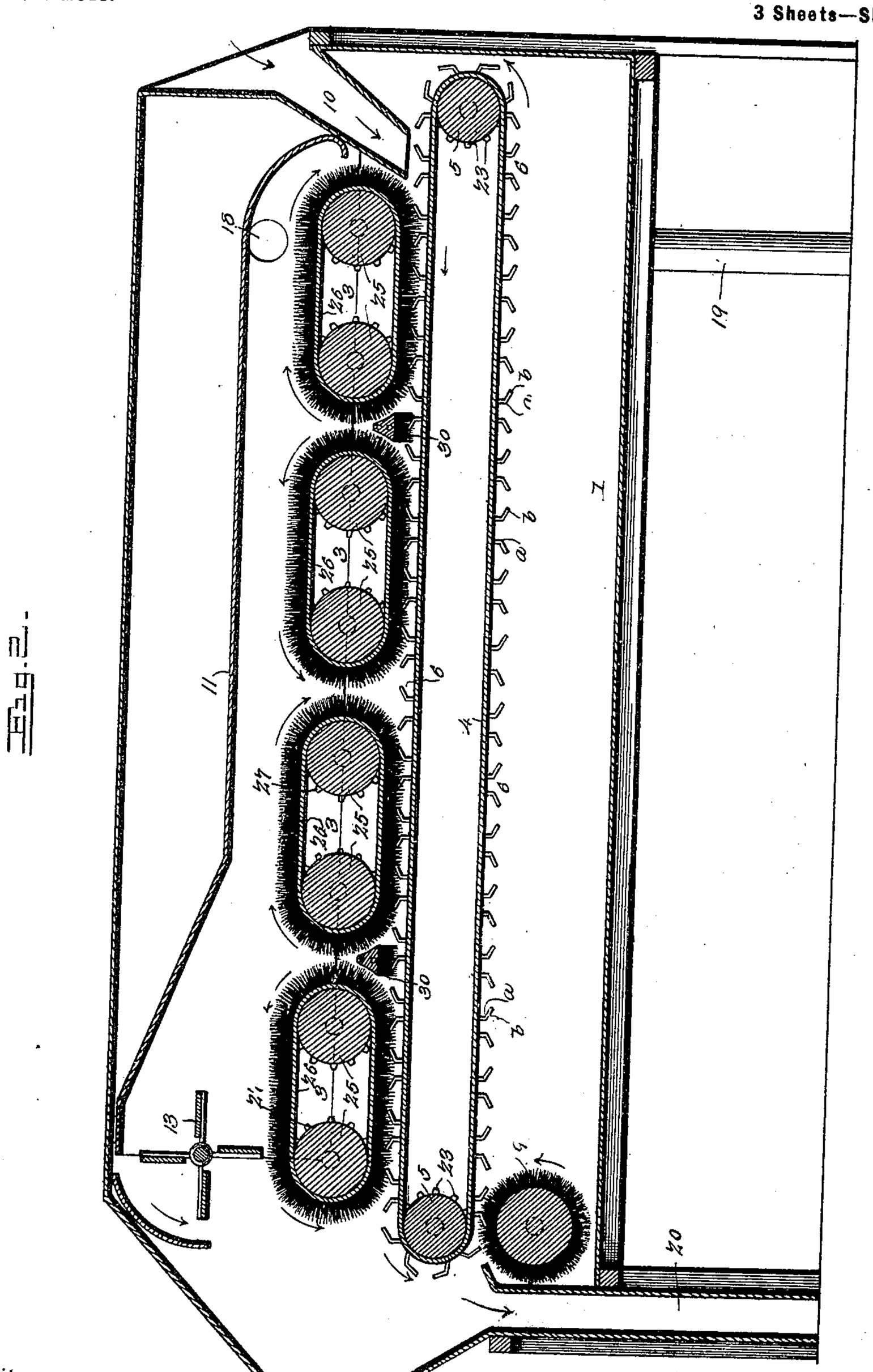
J. KASMEIER.

DELINTING MACHINE.

(No Model.)

(Application filed Apr. 24, 1900.)

3 Sheets—Sheet 2.



Witnesses
C. F. Stewart.
J. W. Garner

John Kasmeier Inventor
By his Attorneys,
C. A. Snow & Co.

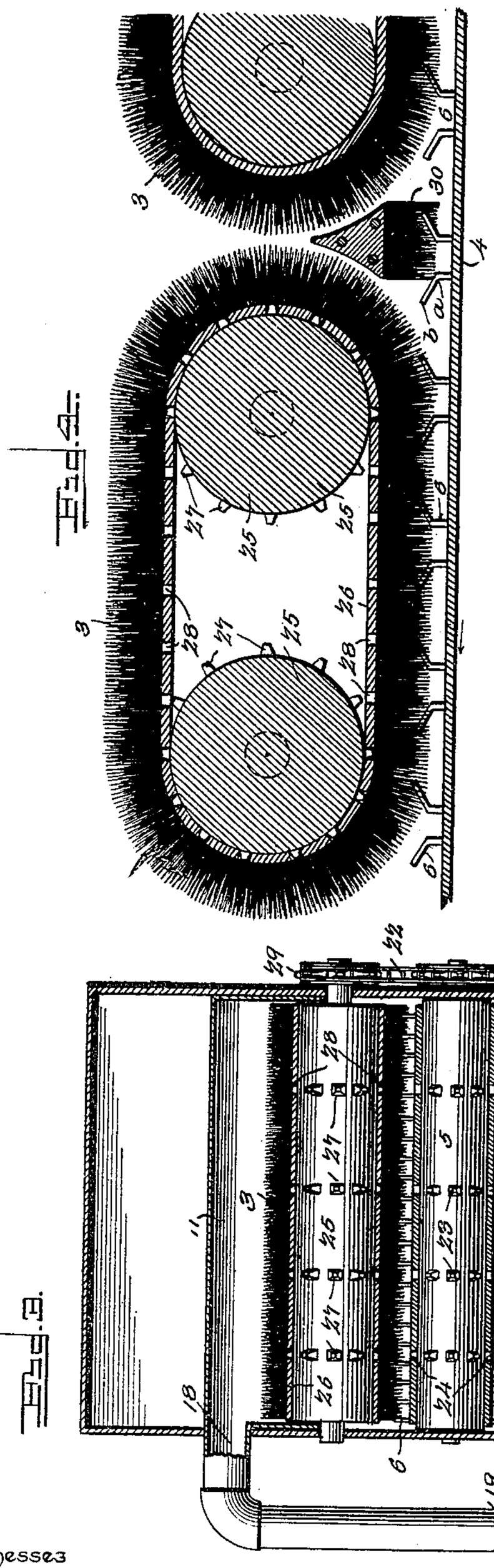
No. 666,384. Patented Jan. 22, 1901.

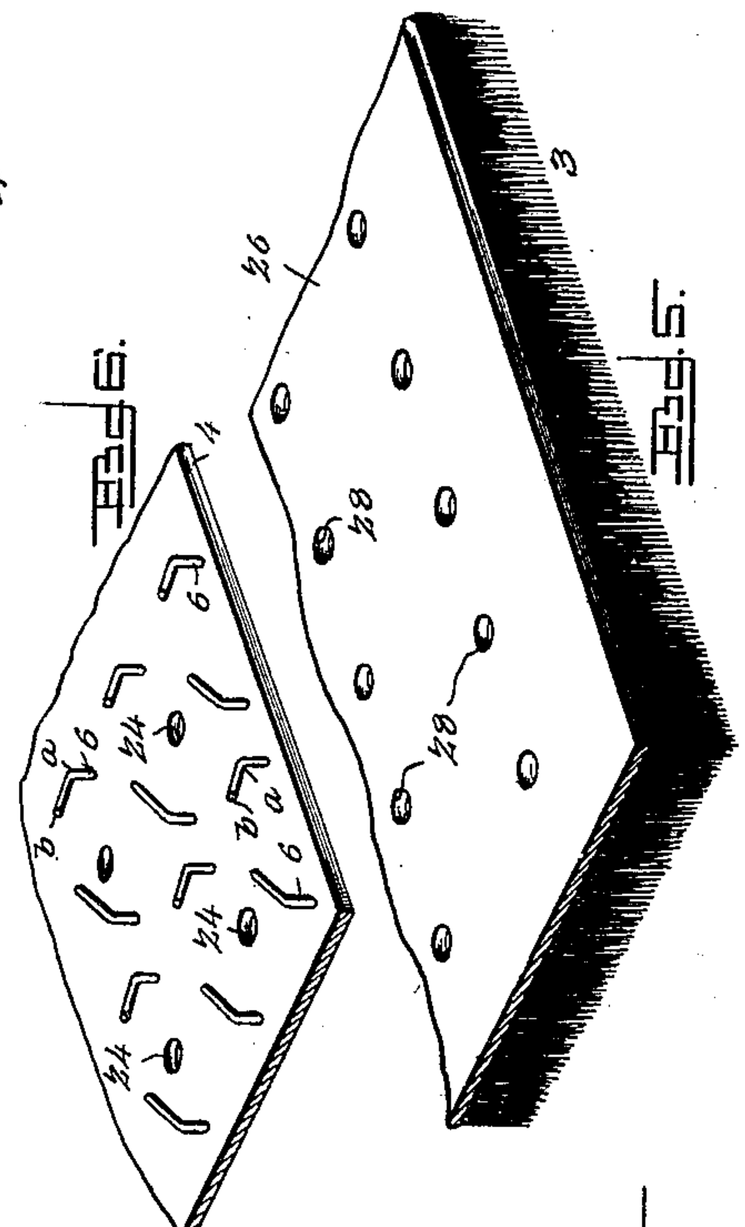
J. KASMEIER.

DELINTING MACHINE.

(Application filed Apr. 24, 1900.)

(No Model.) 3 Sheets—Sheet 3.





Witnesses
P. F. Stewart.
J. W. Garner

John Kasmeier Inventor
by C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

JOHN KASMEIER, OF FLORENCE, ALABAMA.

DELINTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 666,384, dated January 22, 1901.

Application filed April 24, 1900. Serial No. 14,117. (No model.)

To all whom it may concern:

Be it known that I, JOHN KASMEIER, a citizen of the United States, residing at Florence, in the county of Lauderdale and State of Alabama, have invented a new and useful Delinting-Machine, of which the following is a specification.

My invention relates to machines for treating cotton-seed, and particularly to that class of machines known as "delinters," adapted for the separating of the lint from the seed.

This invention is an improvement upon the delinting-machine for which Letters Patent of the United States were granted to Winfield S. Cannaday and myself February 27, 1900, No. 644,276, one object of my present improvement being to so construct the spurs of the feed-belt which operates on the lower sides of the brushes that the same will retain the seeds on the upper lead of said feed-belt while the brushes are polishing them.

A further object of my invention is to increase the efficiency of the machine by increasing the coacting areas of the feed-belt and the brushes.

A further object of my invention is to simplify the construction of the machine.

A further object of my invention is to provide improved means for communicating motion from the feed-belt to the brushes.

My invention consists in the peculiar construction and combination of devices hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a delinting-machine constructed in accordance with my improvements. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a vertical transverse sectional view of the same. Figs. 4, 5, and 6 are detail views.

In the construction of my improved delinting-machine the endless belt 4, which constitutes the feed-belt and is disposed longitudinally in the casing 1 and supported by the rollers 5, is provided with projecting spurs 6 on its outer side, which spurs are disposed in alinement with each other longitudinally of the belt and are bent nearly at right angles, as at *a*, thereby providing the said spurs with overhanging portions *b*, which extend over the cotton-seeds disposed on the upper lead of the endless belt and fed thereto through the feed-hopper 10 and serve to retain the cotton-seeds on the upper lead of the feed-belt during their passage under the coacting brushes, which remove the lint from the cotton-seeds and polish the cotton-seeds, the construction of the angular spurs being such that the cotton-seeds are prevented from being drawn upward from the feed-belt by the delinting and polishing brushes. The rollers 5 are provided on the projecting ends of their shafts or spindles on one side of the casing 1 with sprocket-wheels 21, which are engaged by an endless sprocket-chain 22. Said rollers 5 are provided with spur-teeth 23, which engage openings 24, with which the feed apron or belt 4 is provided, and thereby the said feed belt or apron is effectually prevented from slipping on the said rollers, as will be understood.

A series of endless traveling brushes 3 are disposed above the feed-belt 4. Each of the said endless traveling brushes comprises a pair of rollers 25 and an endless traveling belt or apron 26, provided on its outer side with the bristles, as shown. The rollers 25 are provided with projecting spurs 27, which engage openings 28, with which the endless traveling belts or aprons 26 are provided, to prevent the latter from slipping on the said rollers, and said rollers are provided with sprocket-wheels 29 on the projecting ends of their shafts or spindles on one side of the casing 1, which sprocket-wheels 29 engage the endless sprocket-chain 22.

It will be understood and observed by reference to Fig. 1 of the drawings that the sprocket-chain 22 engages the sprocket-wheels of the respective endless traveling brushes on opposite sides, respectively, alternately, so that the said endless traveling brushes are alternately moved in opposite directions, as indicated by the arrows in Figs. 1 and 2. A revoluble cleaning-brush 9 is disposed under the feed-belt, at the discharge end thereof, and coacts therewith to brush the cotton-seeds therefrom into a discharge-passage 20 after the cotton-seeds have been delinted and polished by the brushes.

It will be observed by reference to the drawings that the lower sides or leads of the endless traveling brushes are disposed parallel with

the coacting lead of the feed-belt 4 and that the coacting surfaces of said brushes with reference to the said feed-belt 4 are materially increased, hence greatly increasing the efficiency and capacity of the machine without increasing the size thereof.

Stationary brushes 30 are disposed between certain of the endless traveling brushes 3 and in the planes of the lower leads thereof, as shown. A revoluble fan 13 in the upper portion of the casing, near the discharge end thereof, coacts with a deflector or cover 11, with which the casing is provided, to blow the lint which is brushed from the cotton-seeds by the brushes 3 and 30 through a discharge-opening 18 into a pneumatic conveying-flue 19. An opening 14 in the discharge end of the casing admits air to the fan or blower 13.

Any suitable means may be employed for imparting power and motion to the endless feed-belt, the brushes 3 9, and the fan or blower. In Fig. 1 in dotted lines I have indicated the shaft of the brush 9 as being connected to the shaft of the fan or blower 13 by endless sprocket chains and wheels, said shaft of the fan or blower being driven by means of an endless belt and pulleys from any suitable power-shaft, and I have also indicated in dotted lines the shaft of said rotary brush 9 as being connected by means of an endless sprocket-chain and sprocket-wheels with the shaft of the proximate roller 5.

Having thus described my invention, I claim—

1. In a delinting-machine, in combination with the brushes, the endless traveling feed-belt having the projecting spurs provided with overhanging portions *b*, for the purpose set forth, substantially as described.

2. In a delinting-machine, the combination of an endless traveling feed-belt, a coacting endless traveling brush, the coacting leads of said brush and belt being disposed in parallel relation to each other, and a stationary brush coacting with said feed-belt and disposed beyond said endless traveling brush, substantially as described.

3. In a delinting-machine, the combination with the endless traveling feed-belt, of the endless traveling brushes coacting therewith, said endless traveling brushes traveling in opposite directions alternately and the stationary brushes disposed between said endless traveling brushes, and coacting with said feed-belt, substantially as described.

4. In a delinting-machine, the combination of the endless traveling feed-belt, the endless traveling brushes coacting therewith and the stationary brushes disposed between said endless traveling brushes and coacting with the endless traveling feed-belt, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN KASMEIER.

Witnesses:
H. D. SMITH,
G. H. DUDLEY.