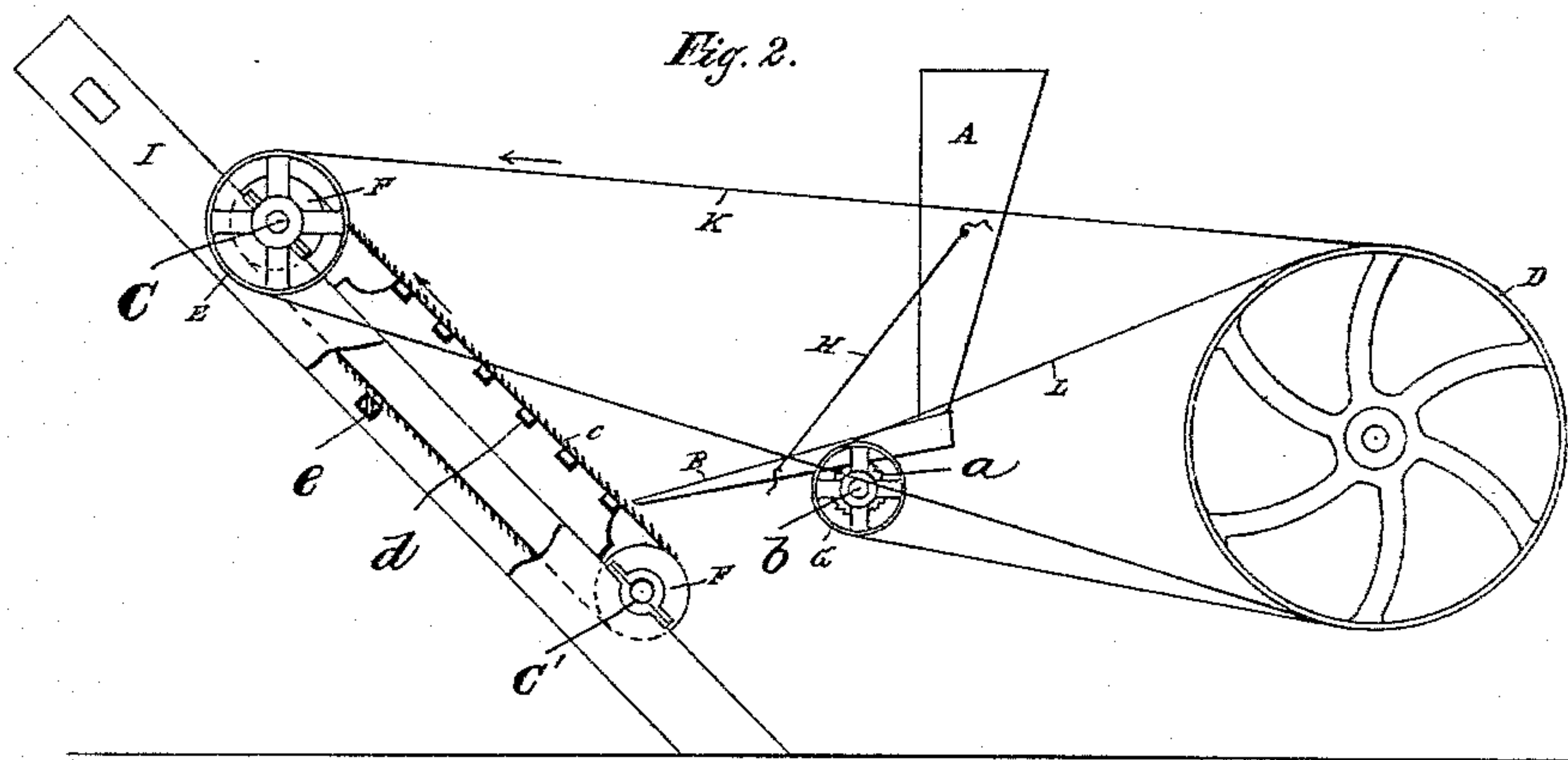
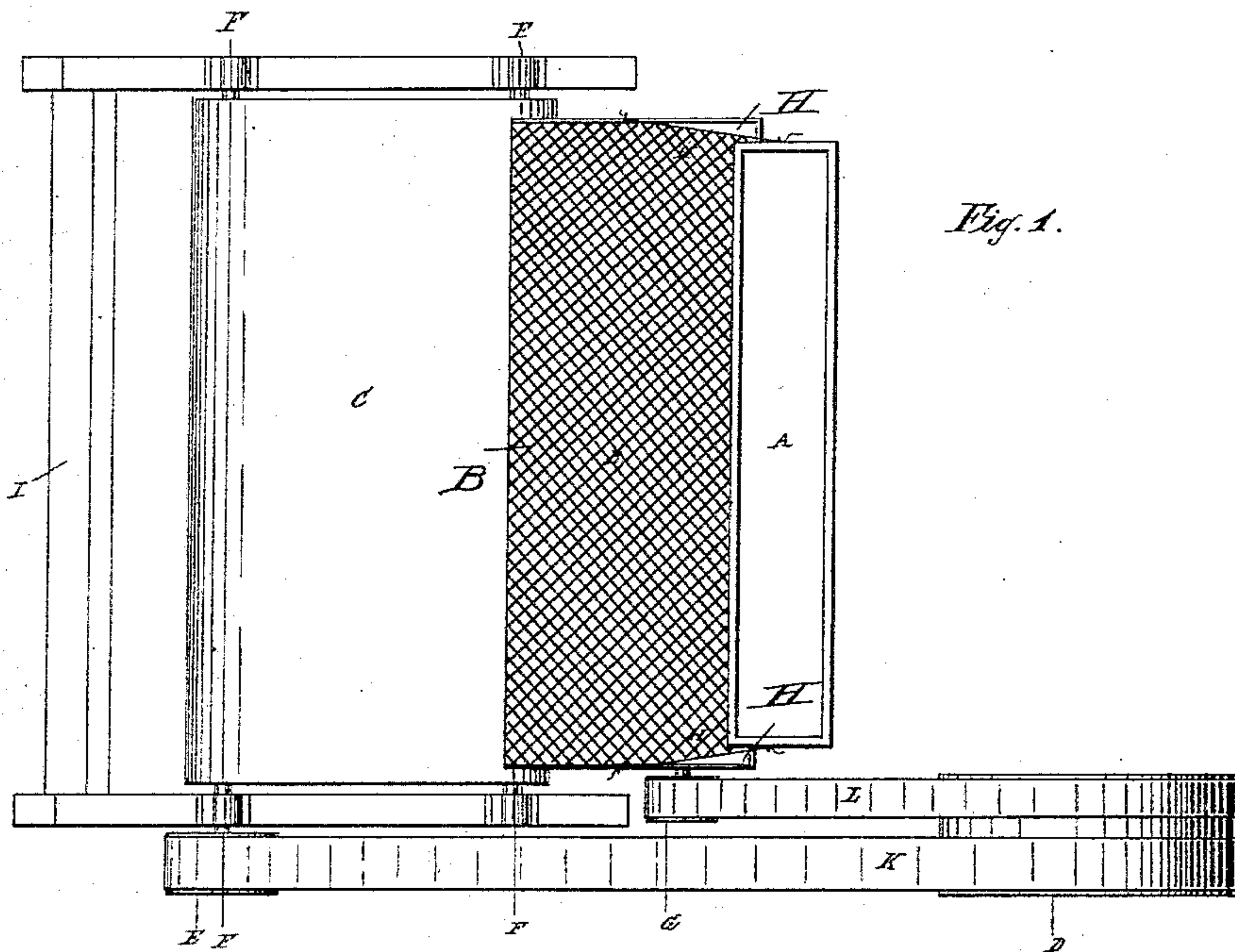


(No Model.)

E. EACHES.
RICE MACHINE.

No. 387,867.

Patented Aug. 14, 1888.



Witnesses.
George J. Yonewine.
Henry Graham.

Inventor,
Ewing Eaches.
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attorney.

UNITED STATES PATENT OFFICE.

EWING EACHES, OF NEW IBERIA, LOUISIANA.

RICE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 387,867, dated August 14, 1888.

Application filed February 21, 1887. Serial No. 228,351. (No model.)

To all whom it may concern:

Be it known that I, EWING EACHES, a citizen of the United States of America, residing at New Iberia, in the parish of Iberia and State of Louisiana, have invented certain new and useful Improvements in Rice-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My object is to improve machines for separating foreign matters from rice in the process of cleaning the same, as will be fully understood from the following description, taken in connection with the annexed drawings, in which—

Figure 1 is a top view of my improved rice-cleaning machine, and Fig. 2 is a side elevation thereof.

Referring to the annexed drawings by letter, A designates a hopper in which the rice mixed with impurities is put. To the lower discharge end of this hopper a screening-shoe, B, is suitably attached, the lower discharge end of which can be raised or lowered, as may be desired, by means of cords or rods H, attached to the side of said shoe and hopper. The screening-shoe is given a vertical shaking motion by means of a toothed or tappet wheel, a, which is keyed on a horizontal transverse shaft, b, bearing a belt-drum, G, and receiving rotary motion from a main driving-drum, D, by means of an endless belt, L.

I designates an inclined stationary frame, the inclination being opposite to the inclination of the screening-shoe B. This frame has secured to it journal-boxes for two horizontal transverse shafts, c c, on which are keyed cylindrical rollers F F. On one end of the hopper shaft c is keyed a belt-wheel, E, which receives rotation from the belt-wheel D by means of an endless belt, K. Around the rollers F F passes an endless apron, C, which is made of cotton, flannel, or other similar material

having a nap surface, which apron is held under proper tension and provided with strips or other suitable backing, d, to prevent sagging.

In operation rice mixed with impurities is fed into the hopper A, and is discharged upon the screen B, which separates fine impurities from it. The rice, mixed with indigo, grass-seed, &c., is discharged from the said screen upon the nap surface of the endless traveling apron C, moving in the direction indicated by the arrow on Fig. 2. The rice, by reason of its barbed hulls, will adhere to the nap surface of said apron and be carried up and over the roller F and allowed to fall into a suitable receptacle, while the indigo, grass-seeds, and other smooth-surface matters, which will not adhere to the nap surface of the apron C, will roll or slide at once from the apron, and will not be carried up with the unhulled rice. Should any of the rice adhere to the apron on the back side thereof, it can be readily separated therefrom by means of a clearing-strip, e, which is secured to the stationary frame I in such a manner as to engage the napped surface of the apron in its downward movement, as shown in Fig. 2.

Having described my invention, I claim—

The combination, in a rice-machine, with an inclined supporting-frame carrying the rollers C C', the pulley E, and the pulley F, of the endless apron having a nap surface, the pulleys D and G, belts K and L, the pulley G, provided with a spur-wheel, the hopper A, and the screen B, connected therewith, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

EWING EACHES.

Witnesses:

GEORGE JEYENEWINE,
HENRY J. RHODES.