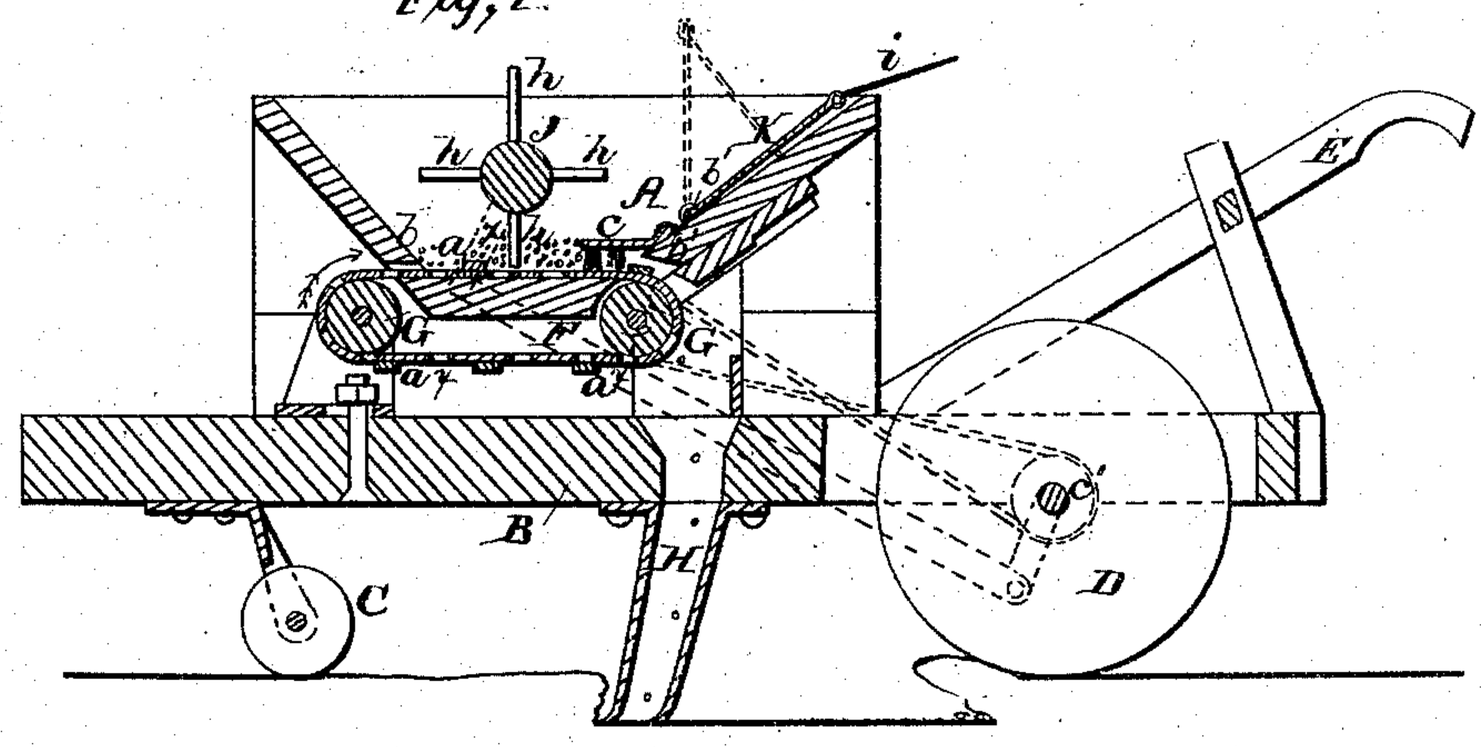
Keijzer & Fox.

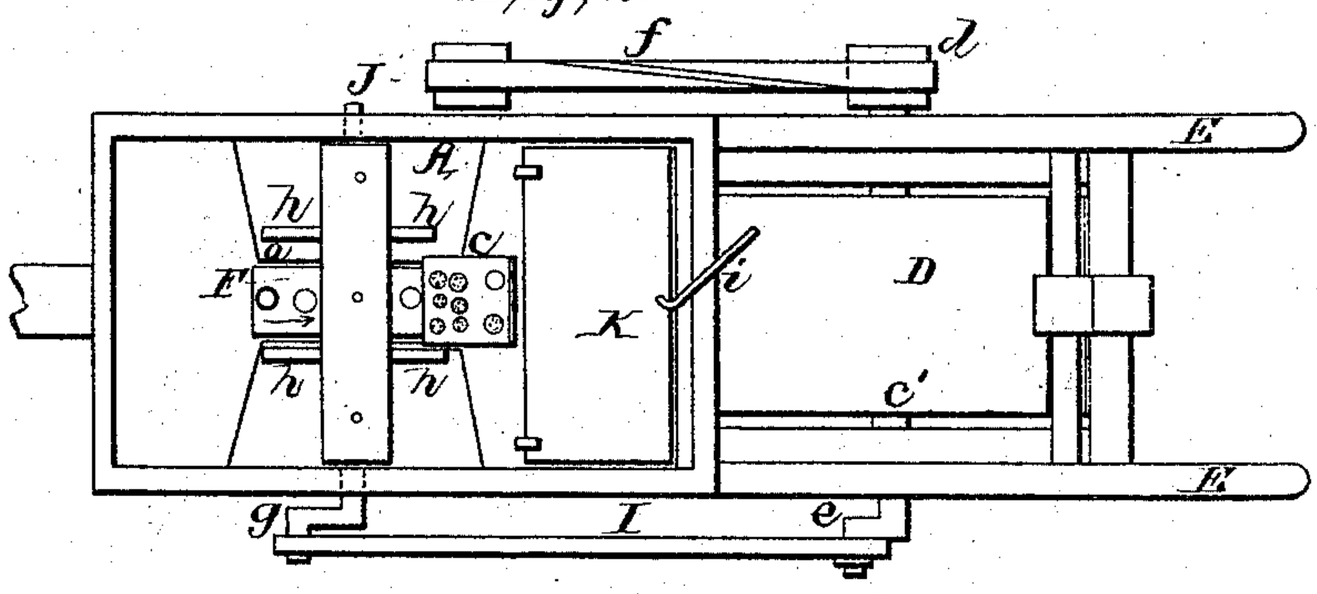
Seed Planter.

No. 21,273. Patented Aug. 24, 1858.

Fig; 1.



Fig; 2.



UNITED STATES PATENT OFFICE.

D. B. KEIPER AND A. C. FOX, OF TEXANA, TEXAS.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. **21,273**, dated August 24, 1858.

To all whom it may concern:

Be it known that we, D. B. KEIPER and A. C. FOX, of Texana, in the county of Jackson and State of Texas, have invented a new and Improved Seeding-Machine; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side sectional elevation of our improvement. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in the employment or use of a perforated endless band which is fitted in a seed-box and arranged, as hereinafter shown, for distributing the seed, in connection with a reciprocating rotating agitator, and an adjustable plate, K, for the purpose of preventing the seed from clogging and insuring the proper discharge of the same from the seed-box.

The invention is more particularly designed for the planting of cotton and other seeds, which, to insure early germination and for other causes, are planted in a moist state, and which, in consequence of their moisture, derange the distributing devices of all machines hitherto constructed by causing the swelling of the working parts—an effect due to the absorption of moisture by said parts. By our improvement this difficulty is obviated.

To enable others skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents a seed-box, which is placed on a frame, B, said frame being supported at its front and back ends by rollers C D.

To the back part of the frame B two handles, E E, are attached.

F is an endless perforated band, which may be constructed of leather or other suitable material, and which works over two rollers, G G, placed just below the seed-box and in such relation to it that the upper part of the band will work in the seed-box at its bottom, a rabbet or groove, *a*, being made in said bottom, in which the band works, so that it will be "flush" with the bottom. The endless band F works through apertures *b b'* made in the front and back ends of the seed-box, and a brush, *c*, which serves as a cut-off, is placed in front of the aperture *b'*, which aperture is directly over a seed-conveying spout, H, attached to the frame B in front of the back roller D. The shaft *c'* of the roller D projects beyond the sides of the frame B at each side, and a pulley, *d*, is attached to one end of the shaft and a crank, *e*, to the opposite end. The pulley *d*, by means of a cross-belt, *f*, drives the endless band F and the crank *e* by means of a connecting-rod, I, and a crank, *g*, on the end of a shaft, J, gives said shaft J an oscillating or reciprocating rotating motion. The shaft J is fitted transversely in the seed-box A, and provided with radial arms *h*, the ends of which, when the arms are in a radial vertical position, nearly touch the band F, as shown clearly in Fig. 1.

Within the seed-box A a plate, K, is placed. This plate is hinged at its lower edge to the back side of the box a short distance from its bottom, and a rod or support, *i*, is attached to the upper end of the plate. This plate, by means of the rod or support *i*, may be adjusted at any angle from a vertical position to a position corresponding with that of the back side of the seed-box. This will be understood by referring to Fig. 1.

As the machine is drawn along the endless band F is moved in the direction indicated by the arrow, and the seed fills the perforations in the belt, which perforations are seed-cells. The filled cells pass underneath the cut-off *c*, and as the cells pass around the back pulley the seeds are discharged therefrom into the tube H, the lower end of which forms the furrow, the roller D covering the seed. The arms *h*, by moving back and forth, "loosen up" the seed, preventing it from matting together and insuring its proper discharge, and as the seed in the box A gets low the plate K is elevated, as shown in red, Fig. 1, so as to curtail the capacity of the box and throw the seed over the band F, so that it may all be discharged.

The endless band will not be affected by moisture, like the wooden cylinders and seed-slides, and damp seed may be sown equally as well as dry seed. This is an important feature, for cotton-seed is moistened and rolled or agitated with sand to prevent them as much as possible from adhering together, the object being to remove the lint or fine fuzz from off

the seed. Various other kinds of seed are also frequently soaked in water for a greater or less length of time to insure early germination.

We would remark that, if desired, projecting ledges or cleats a^x may be attached to the band F in order to facilitate or expedite the discharge of the seed.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the endless band F, oscillating arms *h*, and adjustable plate K, arranged relatively with each other as shown, whereby the seed is properly agitated and kept, when reduced, within the box A within the reach or path of oscillation of the arms *h*.

D. B. KEIPER.
A. C. FOX.

Witnesses:
T. PIERCE.
B. PIERCE.