(No Model.)

J. T. CRANDLE.

SCREEN.

No. 290,666.

Patented Dec. 25, 1883.

Fig. 1.

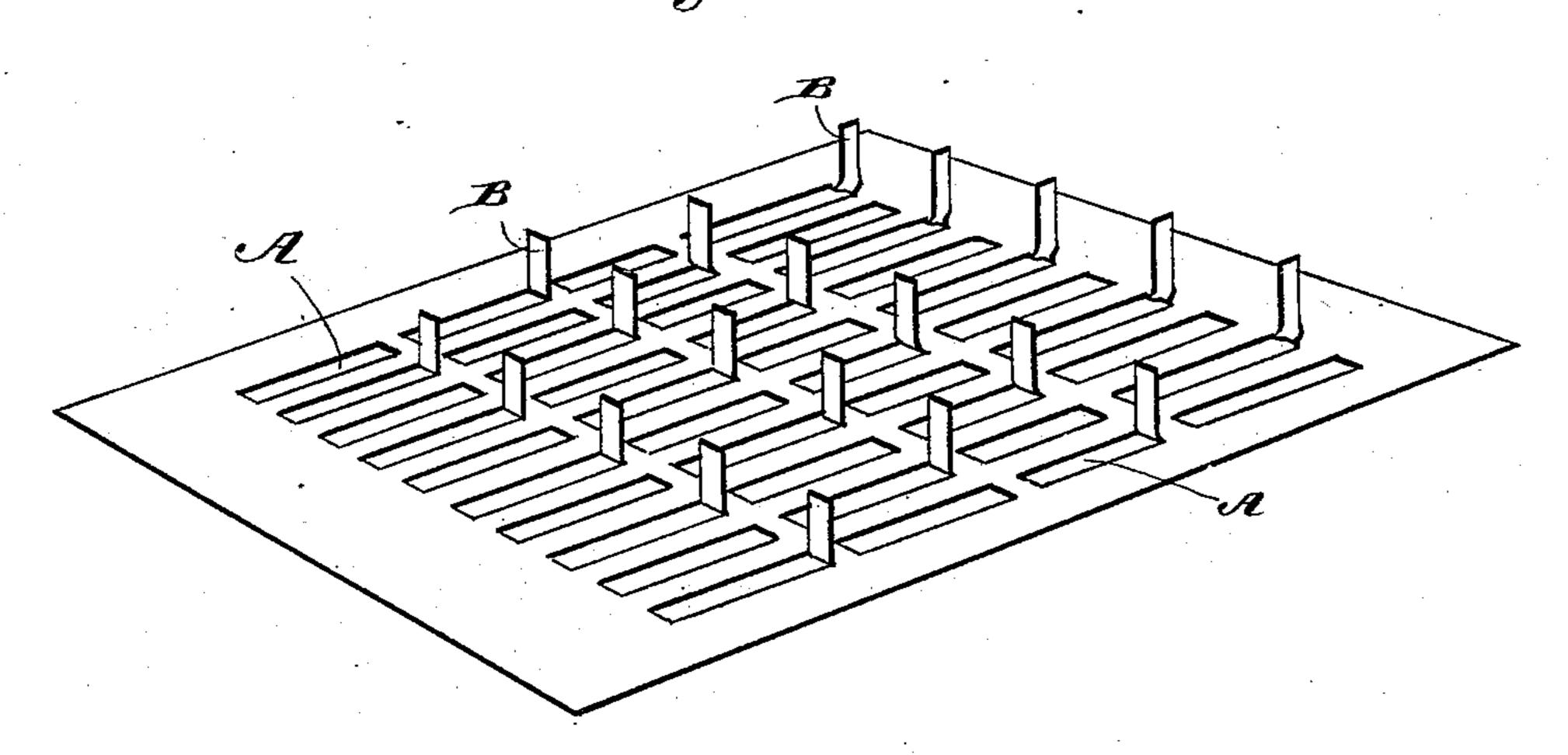
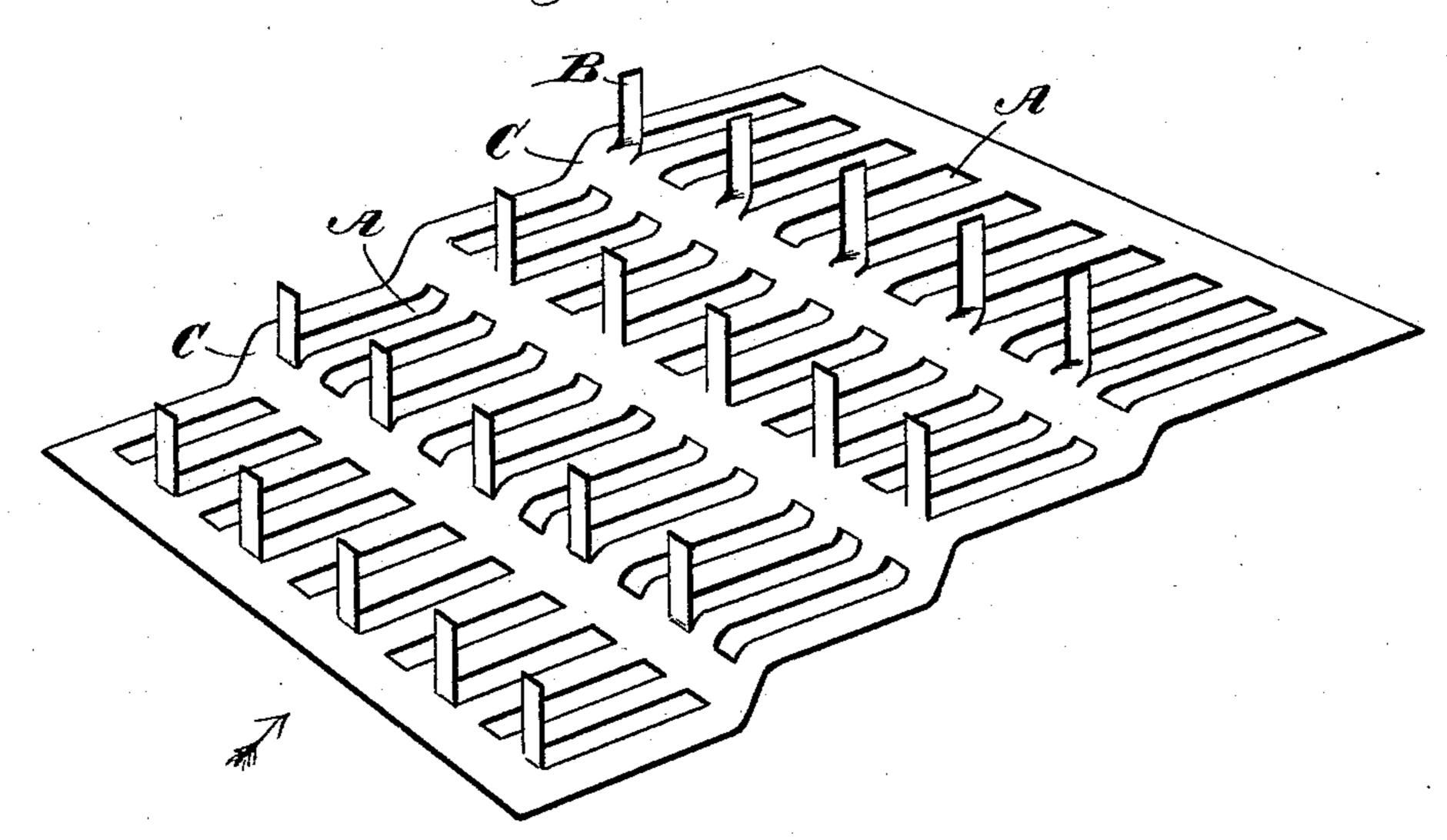


Fig. 2.



Robert Everett. George Tilghman John J. Borandle Ly Worth Balcock
Attorney

United States Patent Office.

JOHN T. CRANDLE, OF SAVANNAH, NEW YORK.

SCREEN.

SPECIFICATION forming part of Letters Patent No. 290,666, dated December 25, 1883.

Application filed June 12, 1883. (No model.)

To all whom it may concern:

Beitknown that I, John T. Crandle, a citizen of the United States, residing at Savannah, in the county of Wayne and State of New York, have invented certain new and useful Improvements in Screens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to screens which are provided with shoulders or prongs, or both, to throw back the grain while in transit and increase the efficacy of the screen.

The nature of said invention consists in the construction and combination of the parts constituting said screen, as hereinafter more particularly set forth and claimed.

Figure 1 represents a perspective view of a screen having the prongs but not the shoulders, and Fig. 2 represents a similar view of a screen having both the prongs and the shoulders.

In these figures the screen is shown as composed of a single sheet of metal having longitudinal slots A arranged in successive se-30 ries, each series being divided from that in front of it by a narrow transverse band of metal, and each individual slot of each series being divided from the ones nearest to it by longitudinal strips or bands. At the forward 35 end of every third slot, reckoning transversely, is a raised prong, B, which may be formed by bending upward a part of the metal which has been cut to make said slot. The set of prongs for each successive rearward series of 40 slots A begins at a different point, so that no longitudinal row of slots is left unguarded by one of these prongs. Thus the first prong at the left of the first series is located at the first slot, whereas the first prong at the left of the 45 second series is located at the second slot, and the second prong at the left of the third series is located at the third slot. One series of prongs is twisted, so as to present their

edges toward the grain. The others present their flat sides thereto.

As shown in Fig. 2, it is often advisable to bend the screen at the beginning of each series of slots except the first, so as to form successively ascending transverse shoulders C, above which said prongs arise. When the grain 55 is caused to travel over the screen, the said shoulders and prongs throw it back again and again, allowing the dust and fine rubbish to fall meanwhile through the slots.

The prongs may be attached in any conven- 60 ient manner, instead of being in one piece with the metal of the screen, and the latter may be wire instead of slotted metal.

Having thus described my invention, what I claim as new, and desire to secure by Letters 65 Patent, is—

1. A screen consisting of a metal sheet or integral fabric provided with successive series of slots and successive-series of prongs, the latter being less in number than said slots 70 and distributed in line with each longitudinal row of slots, substantially as set forth.

2. A screen consisting of a metal sheet or integral fabric provided with a successive series of slots, shoulders, and prongs, said prongs 75 and shoulders being in one piece with said sheet or fabric, substantially as set forth.

3. A screen consisting of a sheet of metal bent into successively-ascending transverse shoulders, and provided with successive series of slots arranged before said shoulders and prongs, distributed in line with each longitudinal row of slots, substantially as set forth.

4. A screen provided with a series of rows of raised prongs, one of said rows having its 85 individual prongs turned to present their edges to the grain, and the prongs of the other successive rows to present their broad sides to it, substantially as set forth.

In testimony whereof I affix my signature in 90 presence of two witnesses.

JOHN T. CRANDLE.

Witnesses:
W. A. Hunt,
L. W. Burton.