

(No Model.)

P. DRENDUL.  
SAND SCREEN.

No. 410,078.

Patented Aug. 27 1889.

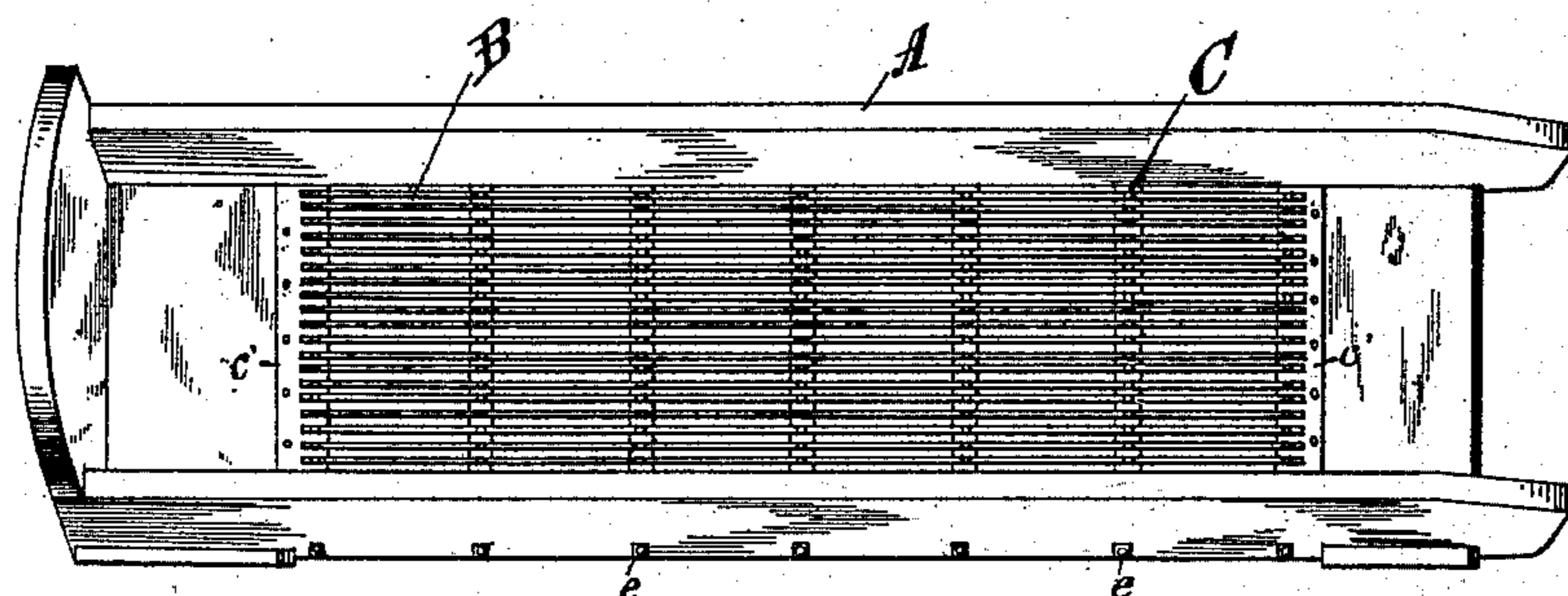


Fig. 1

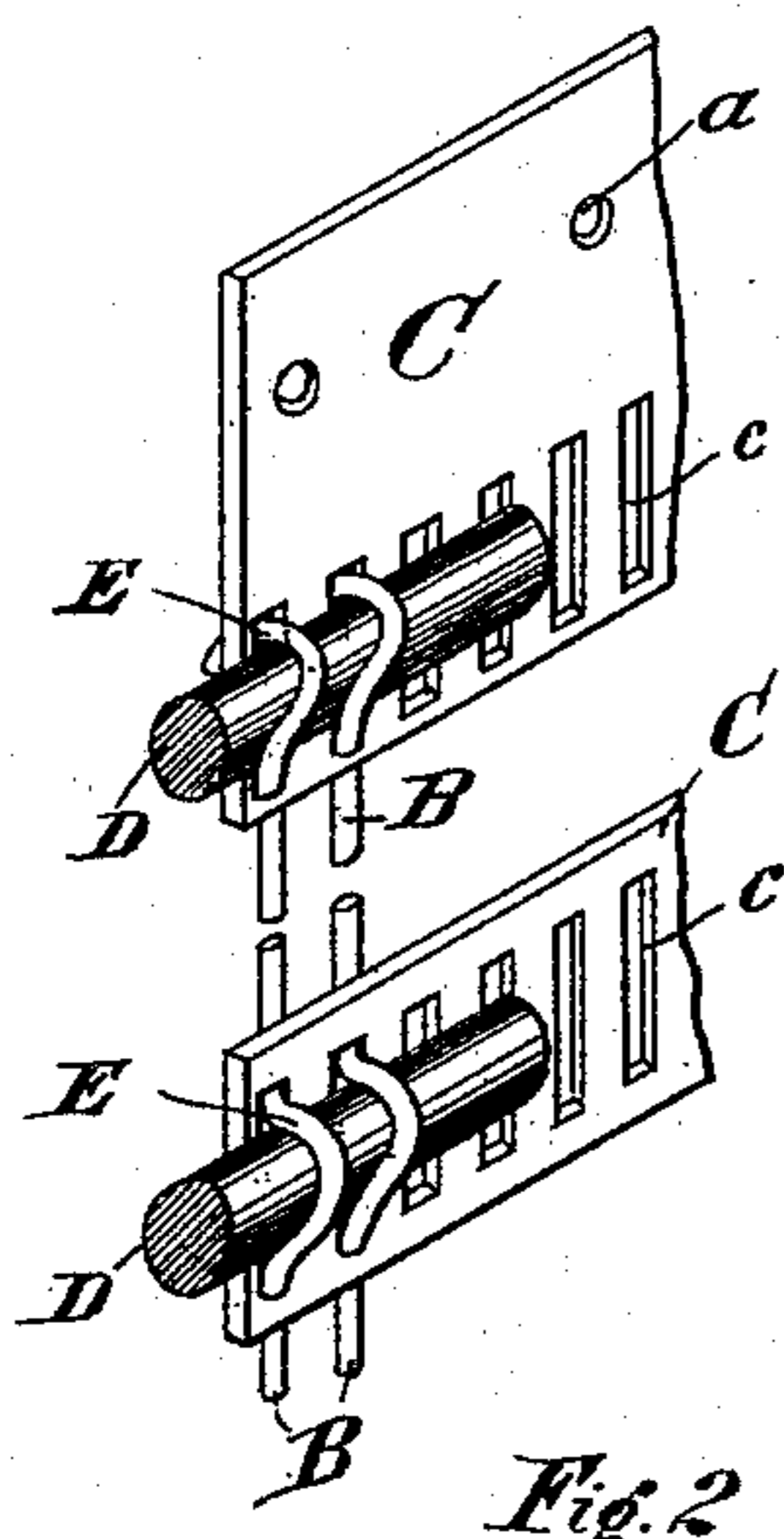


Fig. 2

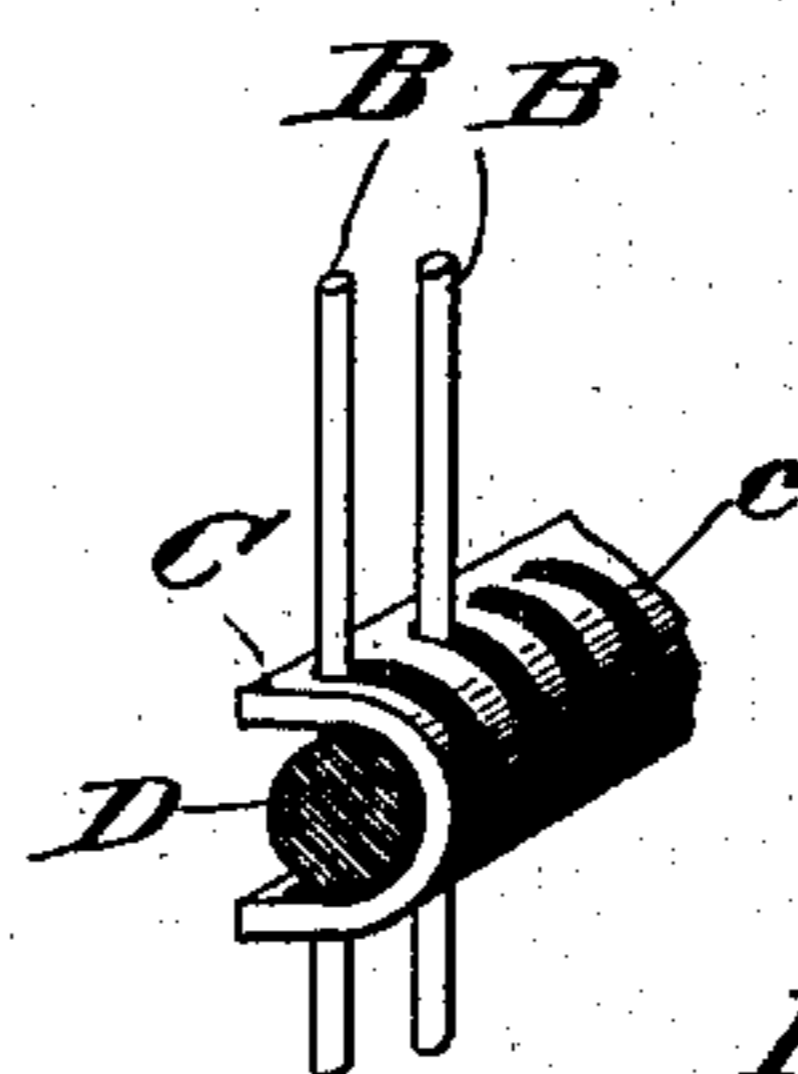


Fig. 3

Witnesses  
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By his Attorney Chas. C. Tiltman

# UNITED STATES PATENT OFFICE.

PAUL DRENDUL, OF CHICAGO, ILLINOIS, ASSIGNOR TO LOUIS G. BEERS,  
OF SAME PLACE.

## SAND-SCREEN.

SPECIFICATION forming part of Letters Patent No. 410,078, dated August 27, 1889.

Application filed May 20, 1889. Serial No. 311,459. (No model.)

*To all whom it may concern:*

Be it known that I, PAUL DRENDUL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sand-Screens, of which the following is a specification.

My invention relates to wire sand-screens, and especially to that class of screens in which the wires are secured longitudinally within the frame and at proper distances apart to permit of the separation of the finer or smaller particles of sand from the coarser ones or from gravel or other substances; and it consists in certain peculiarities of the construction of the same and in the novel method of securing the wires, as will be hereinafter more fully set forth, and specifically claimed.

In the screens now in common use, and to which my invention is particularly adapted, the device is placed in an inclined upright position and the sand is thrown against the wires near the top and allowed to slide down the screen, in which descent the sifting or screening process is accomplished.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of my screen. Fig. 2 is a detail rear view showing my method of securing the wires. Fig. 3 is a view of a modification.

Similar letters refer to corresponding parts throughout the different views of the drawings.

A represents the main frame of my screen, usually made of wood and of any desired size or form.

B B are the wire strands forming the screening body or surface.

C C are strips or pieces of sheet metal, provided with vertical slots *c c* or holes *d d* for the reception and retention of the wires B B.

D D are metal rods for securing and supporting the wires B B in the slots *c c*, and are secured to the side pieces of the main frame

A by means of screw-nuts *e e* or otherwise, as desired.

In Fig. 2 of the drawings I have shown sections of two pieces of sheet metal provided with slots *c c*, the upper piece showing the construction and having a number of holes *a* for securing it to the head or foot of the frame A, as seen in Fig. 1. The other piece in this figure shows one of the intermediate horizontal strips with similar slots.

In preparing the metal strips or plates for use the material is first cut into proper widths and lengths and the slots formed therein at suitable distances apart, and as many of these strips as are required in a screen are placed parallel with each other at desired points. The wire strands B are then bent, as shown in Fig. 2, with a number of curves or depressions E to correspond with the number of sheet-metal strips required. The bent or curved portions of each wire are then inserted into and pressed through the slots *c c*, when the rods D D are inserted into the loops thus formed, and the body of the screen is complete and ready to be secured to the frame, which is done by fastening the upper and lower pieces *c'* of metal strips to the head and foot of the frame and securing the rods D D horizontally to the side pieces thereof.

It will be clearly seen that the rods D D not only serve to hold the wires in place, but also afford a durable support at the rear of the screen, as is seen in Fig. 2.

In Fig. 3 is shown a modification which I may use, and in this instance the sheet-metal piece C is cut and formed, as before, with slots *c*; but instead of bending the wires B B, as before, I bend the piece C, as shown in the figure, and place the wires in the slots and secure them there by the rods D D, when the body may be securely attached to the frame, as before.

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

1. In a wire screen, the combination of the frame A, having wires B B, with the plates C C, having transverse slots *c c*, and remov-

able retaining-rods D D, substantially as and for the purpose set forth.

2. In a wire screen, the combination of the frame A, the wires B B, having loops E, the rods D, and the plates C C, having slots c c, substantially as shown and described, and for the purpose set forth.

In testimony whereof I have hereunto set my hand and affixed my seal this 18th day of May, A. D. 1889.

PAUL DRENDUL. [L. S.]

In presence of—

CHAS. C. TILLMAN,

CHAS. F. CRANZ.