

(No Model.)

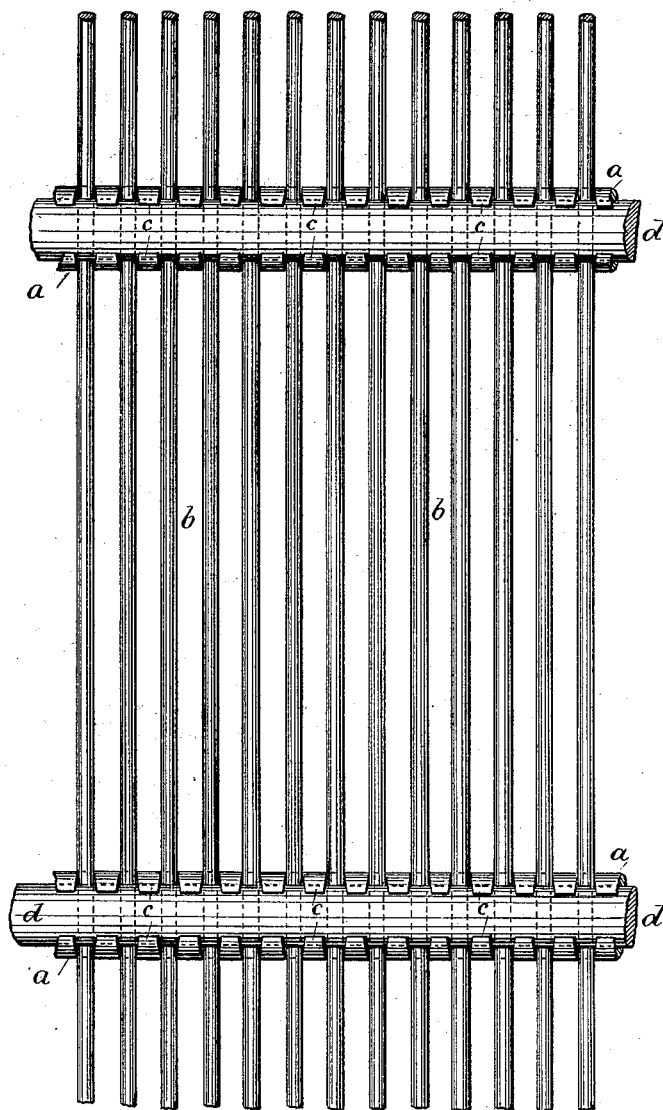
J. NORWOOD.

SCREEN.

No. 347,730.

Patented Aug. 17, 1886.

*Fig. 1.*



*Fig. 2.*



Witnesses:  
J. Stail  
Chas H. Smith

Inventor:  
Joseph Norwood  
per Samuel W. Correll  
Att'y

# UNITED STATES PATENT OFFICE.

JOSEPH NORWOOD, OF BROOKLYN, NEW YORK.

## SCREEN.

SPECIFICATION forming part of Letters Patent No. 347,730, dated August 17, 1886.

Application filed April 5, 1886. Serial No. 197,898. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH NORWOOD, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Screens, of which the following is a specification.

In Letters Patent No. 291,220, granted to me, the wires composing the screen are held by compound cross-bars, each cross-bar being composed of a grooved bar that receives the wires, and a clamping-bar that is riveted to the grooved bar.

My present invention is for dispensing with the rivets and making the connection between the two bars more firm and reliable than heretofore.

I provide upon the grooved bar clipping-fingers, that are bent down upon the clamping-bar to hold the same in place, and thereby avoid the use of rivets, and make the connection much more uniform than in the screens before made, and at the same time any of the wires that may be worn out are easily removed and replaced.

In the drawings, Figure 1. is a face view of a portion of a screen, showing my improvement; and Fig. 2 is a section of the same.

The bars *a a* are grooved transversely, the grooves being at the proper distances apart, and of the size to receive the screen-wires *b b*. In sand-screens these wires *b b* run up and down and the bars *a a* are horizontal; but my improvement may be applied to any kind of

screen. The fingers *c c* stand out from the surfaces of the bars *a a* between the wires *b b*, and are formed of malleable cast-iron or other suitable metal, and I place the clamping-bars *d d* upon the grooved sides of the channeled bars *a a*, to confine the wires in place, and bend down the ends of the fingers *c c* upon the edges of the clamping-bars, so as to confine the said clamping-bars in place. This holds the wires firmly, but allows for any injured wire being removed by slipping the same out endwise. The compound bars run across the sand-screen, and their ends are fastened to the frame, and the screen can be used with either side uppermost. The parts wear away but little under the action of the sand as it slides down the screen, and a shovel is not liable to catch in the cross-bars or fingers as the sand or the fine stones are shoveled from the screen.

I claim as my invention—

The combination, with the screen-wires *b b* and the clamping-bars *d d*, of the bars *a a*, having transverse grooves for the reception of the wires, and fingers constructed to be closed down upon the edges of the clamping-bars to hold the same, substantially as set forth.

Signed by me this 29th day of March, A. D. 1886.

JOSEPH NORWOOD.

Witnesses:

GEO. T. PINCKNEY,  
WALLACE L. SERRELL.