

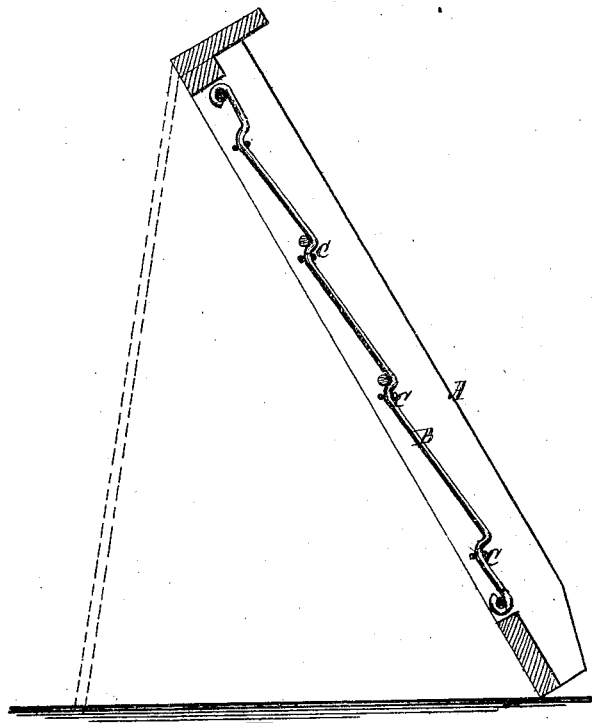
*S. Holdsworth,*

*Sand Screen.*

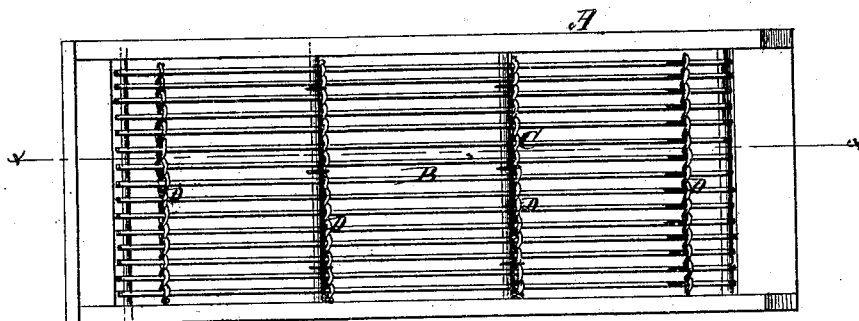
*No. 112,809.*

*Patented Mar. 21. 1871.*

*Fig. 1.*



*Fig. 2.*



Witnesses:  
*John Beecher.*  
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# United States Patent Office.

SAMUEL HOLDSWORTH, OF MASPETH, NEW YORK.

Letters Patent No. 112,809, dated March 21, 1871.

## IMPROVEMENT IN SAND-SCREENS.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that I, SAMUEL HOLDSWORTH, of Maspeth, in the county of Queens and State of New York, have invented a new and useful Improvement in Wire-Screens; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new and useful improvement in wire-screens for masons' use in screening sand, and also for screening grain and coal, and for all purposes for which it is adapted; and

It consists in forming a series of offsets in the screen-wire, and in placing the tie or transverse wires in the angles formed by the offsets, by means of which improvements the operation of "screening" is greatly facilitated and the screen rendered more durable than screens constructed in the ordinary manner, as will be hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a longitudinal section of the screen, showing the offsets and the position of the ties, the section being on the line *z z* of fig. 2.

Figure 2 is a top view.

Similar letters of reference indicate corresponding parts.

A is the frame or box in which the screen-wire is confined.

B is the screen-bottom, which consists of a series of wires placed parallel with each other, with spaces between them of greater or lesser width, according to the use for which the screen is intended.

These wires are bent so as to form offsets, C, in the

screen, (more or less in number,) and of any desired angle and extent of fall.

D represents the ties, which are woven or twisted over or around the wire so as to keep the wires in place and parallel with each other. It will be observed that these ties are placed in the angles of the offsets.

Screens are usually made with straight wires, with the ties projecting upward, and in screening it is usual for the operator to frequently draw his shovel down on the screen to disengage the particles which lodge against the ties. This operation soon wears out the ties, the wires become loosened, and the screen rendered useless until repaired.

By my improvement the article screened receives an impetus at each offset, and is not liable to lodge on the ties, while the ties are shielded from harm by the angle or offset should the shovel be scraped down on the face of the screen in the usual manner.

By means of the offsets C the screen is rendered twice as durable as it would be without them, while the operation of screening is more perfectly and expeditiously performed.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

A wire-screen constructed with offsets, substantially as seen at C, and provided with the ties D in the angle formed thereby, substantially as and for the purposes herein described.

SAMUEL HOLDSWORTH.

Witnesses:

ALEX. F. ROBERTS,  
T. B. MOSHER.