

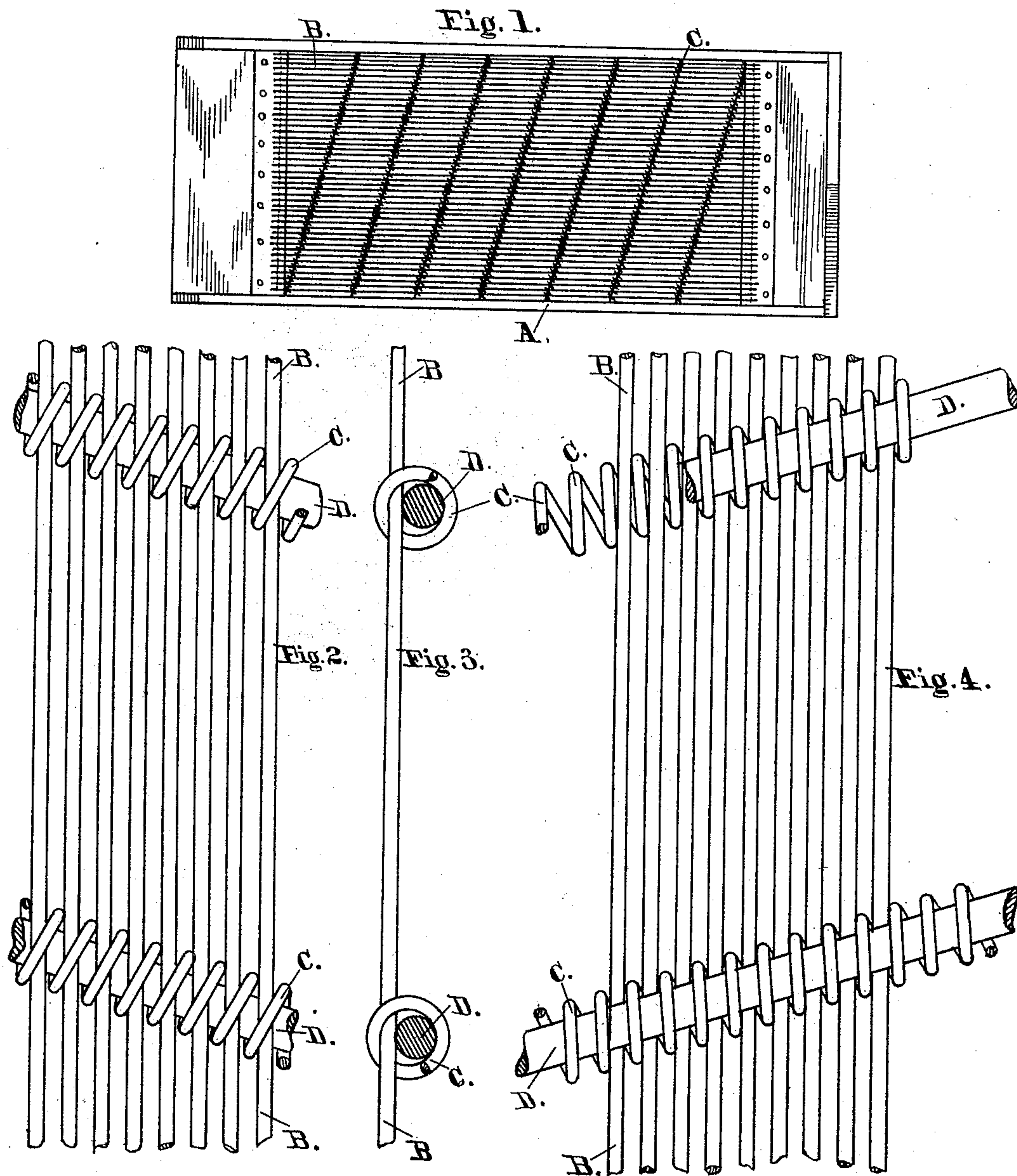
(No Model.)

P. DRENDUL.

SAND SCREEN.

No. 437,025.

Patented Sept. 23, 1890.



Witnesses
B. Reese.
George Hartwell

Inventor
Paul Drendul.
By his Attorney Chas. C. Kilman

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. 437,025, dated September 23, 1890.

Application filed February 3, 1890. Serial No. 338,986. (No model.)

To all whom it may concern:

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

My invention relates to wire sand-screens, and is especially adapted to that class of
10 screens in which the wires are secured longitudinally in a frame and at proper distances apart to permit of the separation of the smaller or finer particles of sand from the coarser ones or from gravel or other sub-
15 stances; and it consists, essentially, in the peculiar and novel method of securing the wires, as will be hereinafter more fully set forth and specifically claimed.

The objects of my invention are to provide
20 screens which shall be simple in construction, strong and durable, yet quite inexpensive, and to more effectually secure and retain the longitudinal wires in their proper positions, thereby avoiding any displacement thereof
25 and the necessity of frequent repairs. I attain these objects by the simple construction and arrangement of the different parts which I employ, and in order to enable others skilled in the art to which my invention pertains to
30 make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 a plan view of my screen. Fig. 2 is an enlarged front view of a portion of the
35 same. Fig. 3 is a vertical sectional view showing the manner of securing the longitudinal wires to the cross rods or braces, and Fig. 4 is a rear view of a portion of the screen.

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

A represents the main or supporting frame of my screen, which is usually made of wood, and of any desired size and form suitable for the purpose for which the screen is designed
45 to be used.

B B are a number of wire rods or strands of proper size and length, which form and constitute the screening body or surface, and are placed and secured parallel with each other
50 and longitudinally within the frame A, near

each end thereof, to suitable cross-pieces in any desirable manner.

C C are a series of retaining-coils, made of wire of suitable size, and formed into a coil or spiral shape, as shown in the drawings. 55

D D are metal rods for securing and supporting or bracing the wires B B at their rear, and are secured to the side pieces of the main frame A by means of screw-nuts or otherwise, as desired. 60

The retaining-wires C are formed into a coil or spiral shape, each coil having the same diameter, and of sufficient size to admit of the easy insertion of the rods or braces D at the rear of the screening-wires B, as is shown
65 in Figs. 3 and 4, and will be readily understood.

By reference to the drawings it will be seen that the coils of the retaining-wires C progress spirally, and when placed and secured
70 in position on the longitudinal wires B they will extend diagonally across the same from side to side of the frame. It is also apparent that when the coiled wire C is placed upon the face or front of the wires B, forming the
75 screening-surface, and pressed into position the larger part of the coil will be at the rear of the wires B, and that the front part of each coil will lie diagonally across the face of one of the longitudinal wires, and firmly se-
80 cure it to the rod D, which is passed through the rear portion of the coils, as seen in Fig. 3, and secured at each end to the sides of the frame, thus assisting in retaining the screening-wires, and also affording a brace to resist
85 the effect of the force of the sand or other material when it is thrown against the face of the screen. By the use of these spirally-coiled retaining-wires I not only firmly secure the wires B to the rod D by diagonally
90 encircling each longitudinal wire with one of the coils, but I also hold them (the screening-wires) in perfect alignment with each other, and regulate the distance or space between them by the use of a large or small wire, as
95 the distance or space may require.

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

1. The herein-described method of making 100

sand-screens, consisting, first, in placing and
securing a number of wires parallel with each
other within a frame, then securing and re-
taining the said wires in alignment by means
5 of rigid spirally-coiled wires and brace-rods,
substantially as and for the purpose set forth.

2. The herein-described method of making
sand-screens, consisting, first, in placing and
securing a number of wires parallel with each
10 other within a frame, then securing and re-
taining the said wires in alignment by means
of rigid spirally-coiled wires and brace-rods,

the coiled wires being placed on the face of
the screening-wires, and their convolutions
pressed between and to the rear of the paral- 15
lel wires, substantially as shown and de-
scribed, and for the purpose set forth.

In witness whereof I have hereunto set my
hand and affixed my seal this 31st day of
January, 1890.

PAUL DRENDUL. [L. S.]

Witnesses:

C. C. TILLMAN,
F. T. ROBINSON.