

(No Model.)

VAN E. GROFF & J. K. MILLER.
MOLDER'S SCREEN.

No. 562,076.

Patented June 16, 1896.

Fig. 1.

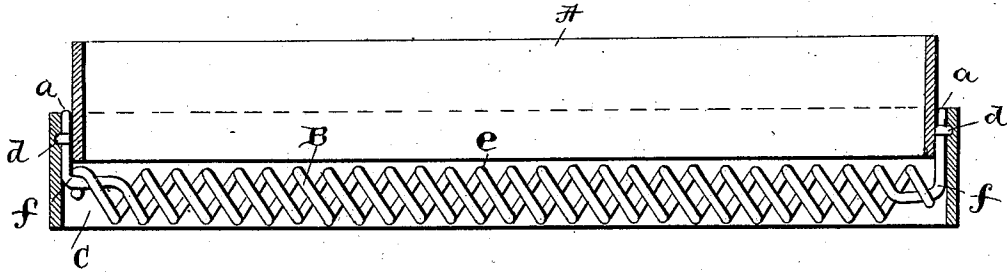


Fig. 2.

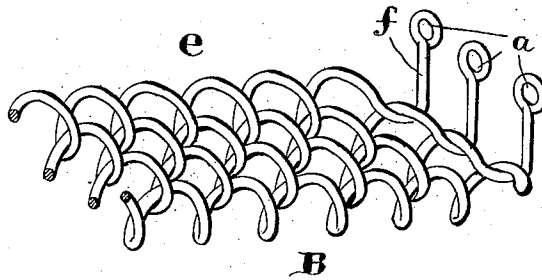
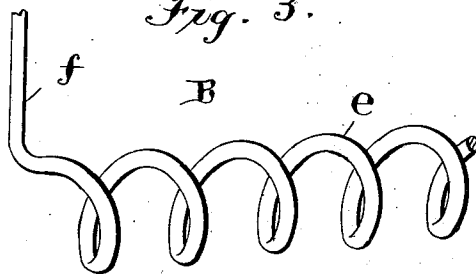


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

VAN E. GROFF AND JOHN K. MILLER, OF ROWENNA, PENNSYLVANIA.

MOLDER'S SCREEN.

SPECIFICATION forming part of Letters Patent No. 562,076, dated June 16, 1896.

Application filed March 21, 1895. Serial No. 542,675. (No model.)

To all whom it may concern:

Be it known that we, VAN E. GROFF and JOHN K. MILLER, of Rowenna, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Molders' Screens; and we 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to improvements in molders' screens or sifters; and it consists of a screen having the specific construction hereinafter shown and described, and particularly pointed out in the claims.

The object of our invention is to provide a screen or sifter for molders' use having a rigid screening-surface formed of rigid wires twisted together to form thereby substantially an upper and a lower screening-surface, the ends of each wire being fastened to a suitable frame in the manner hereinafter shown and described.

Figure 1 is a vertical sectional view of the screen, taken longitudinal the wires forming the same. Fig. 2 is a perspective view of a portion of the screening-surface. Fig. 3 is a perspective view of one of the wires.

A designates a rectangular frame or a frame of any desired contour, to which the wires B are attached in a manner to be now described. Each of these wires is twisted into a spiral, as shown in the accompanying drawings, and then the wires twisted or woven together, as illustrated in Fig. 2, one end of each wire being attached to the frame A preferably by forming an eye *a* in the ends of each wire and passing through these eyes staples *d*, which are placed on the inner side of the frame A. A hook or band C is then passed around and over the secured ends of the wires. We preferably form a horizontal surface *e* (shown in Fig. 1) and then bend each wire from the point *f* upward, thus having the outer end of each wire bent upward and the twisted or woven portion forming only the bottom of the sifter.

By forming the screen of wires twisted together, as here shown, we provide substantially a double screening-surface—that is, the sand after being knocked or crumbled by the

upper convolutions of the wires falls through, and owing to the movement of the screen in the hands laterally it strikes the lower convolutions, thus breaking it up again. The wires being rigid form a rigid bottom and prevent sagging and consequent separation of the convolutions and also make a durable strong screen. It is essential that the wire should be made rigid in order to prevent sagging of the screen and separation of the convolutions, and in that sagging of the screening-surface would tend to draw the held ends of the wires out of the frame.

Molders' screens as now made are very short-lived and are quite expensive for that reason. By making a screen of the heavy wire, as here shown, a double screening-surface is provided without sacrificing the size of the openings, and a rigid long-lived screen is produced.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A molder's screen comprising a frame, rigid wires wound in spiral form and woven together, said wires interlocking, and extending across the frame, each wire having but one end connected with the frame and its opposite end supported wholly by its interlocking with the oppositely-extending wires, substantially as described.

2. A screen composed of a series of spirally-formed wires, each wire having one end only turned upward, a frame, to which the upturned ends of the wires are connected, the opposite ends of the wires being interwoven with the oppositely-extending wires for the purpose set forth.

3. A screen for molders' use, comprising a series of oppositely-extending spirally-formed wires, one end only of each oppositely-extending wire connected with the supporting-frame, the other end of the wire supported by its interlocking with the opposite wires, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

VAN E. GROFF.
JOHN K. MILLER.

Witnesses:
THOS. J. LYNCH,
JNO. B. BASTIAN.