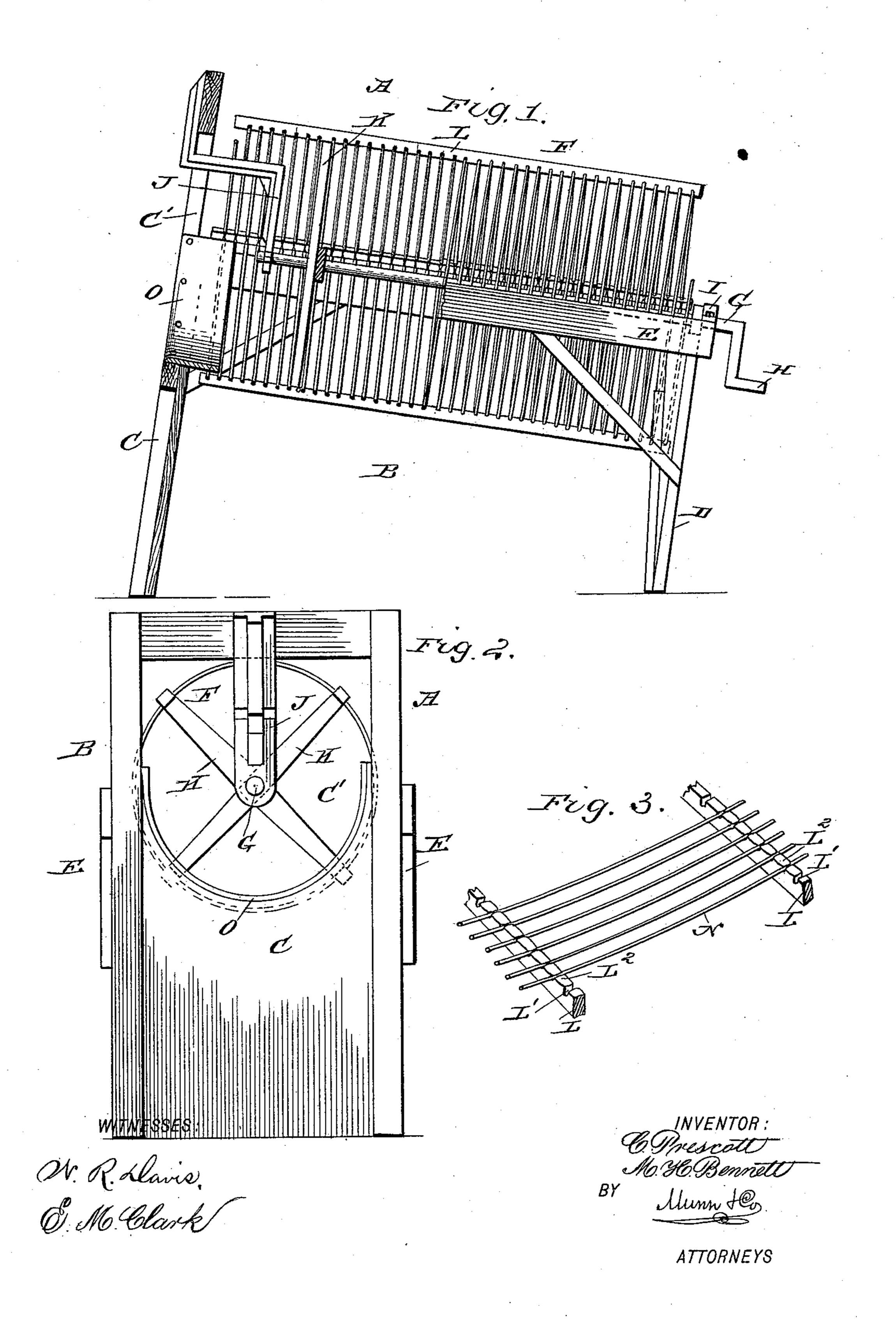
(No Model.)

C. PRESCOTT & M. H. BENNETT. SAND SCREEN.

No. 447,162.

Patented Feb. 24, 1891.



United States Patent Office.

CHARLES PRESCOTT AND MOSES H. BENNETT, OF FAIRMOUNT, NEBRASKA.

SAND-SCREEN.

SPECIFICATION forming part of Letters Patent No. 447,162, dated February 24, 1891.

Application filed June 30, 1890. Serial No. 357,269. (No model.)

To all whom it may concern:

Be it known that we, CHARLES PRESCOTT and Moses H. Bennett, of Fairmount, in the county of Fillmore and State of Nebraska, have invented a new and Improved Sand-Screen, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved sand-screen which is simple and durable in construction, very effective in operation, and quickly separates the fine sand from the coarser materials, such as gravel, &c.

The invention consists in certain parts and details and combinations of the same, as will be described hereinafter, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement with parts in section. Fig. 2 is an upper end view of the improvement; and Fig. 3 is a perspective view of part of the screen, showing the fastening of the coiled wire to the longitudinal bars.

The improved sand-screen A is provided with a suitable frame B, having an inclined 30 head C and a foot D, said head and foot being connected with each other by suitable beams E. In the frame B is arranged a screen F, having a longitudinal and slightly-inclined shaft G, carrying at its lower end a crank-35 arm H for conveniently turning the shaft and its screen. The shaft is mounted near its lower end in a bearing I secured on the foot D, and the upper end of the said shaft is journaled in a bracket J, secured to the 40 head C and projecting through the opening C' in the latter a suitable distance into the screen F, as is plainly shown in Fig. 1. The bracket J is arranged in this form so as to present no obstruction when introducing ma-45 terial through the opening C' into the upper end of the screen F.

On the shaft G are secured sets of spokes K, which support at their outer ends longitudinally-extending bars L, each provided with recesses L' formed on their inner sides and adapted to receive the coils of a wire N forming the meshes of the screen. The wire N is coiled in cylindrical form and is passed into the several recesses L' of the longitudinal bars L, after which the part L² extending be-

tween two successive recesses L' is hammered so as to cover the coil, thereby holding the latter in place on the longitudinal bars. The coil of wire N extends throughout the length of the bars L and the coils are placed suit- 60 able distances apart, according to the material under treatment.

In the bottom of the opening C' is secured a semicircular plate O, which extends into the upper end of the screen F, so that the 65 material passed over the said plate O is guided onto the upper end of the screen. As the latter is placed in an inclined position, the material readily passes from the upper end of the screen toward its lower end when the 70 shaft G is turned, and the material is constantly agitated by the revolution of the screen, so that the fine sand falls through the meshes formed by the coils of the wire N between the head C and the foot D, while the 75 coarser material travels along the screen to the lower end and drops out of the latter at the outside of the foot D.

It will be seen that a screen formed in this manner is very simple and durable in construction, can be cheaply manufactured, and is not liable to get out of order. The bars L are preferably of a soft metal, so as to permit easy riveting of the parts L² to lock the coils of the wire N in place.

The bars L may be placed inside the coil of wire N, and in this case the recesses L' are formed on the outer side or top of the bars.

Having thus described our invention, we go claim as new, and desire to secure by Letters Patent—

The herein-described screen, comprising the frame B, having a circular opening C' in its front, a double angle-bracket J, secured to 95 the front of the frame, projecting through the said opening, and having a shaft-bearing in the lower end of its inner depending arm, a bearing I at the opposite end of the frame, a rotary sieve having a central shaft G mounted 100 in the said bearings, the bracket J, projecting into the interior of the screen, as shown, and the curved plate O, projecting inwardly from the bottom of the opening C', substantially as set forth.

CHARLES PRESCOTT.
MOSES H. BENNETT.

Witnesses:

CLARK ROBINSEN, J. E. CURTISS.