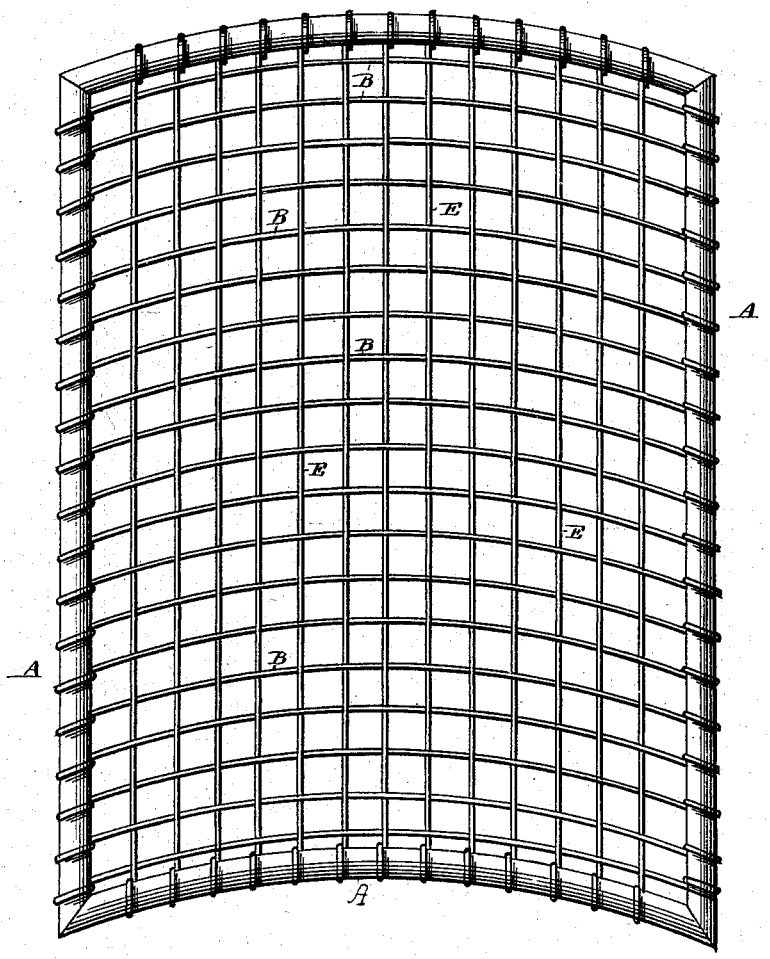
(No Model.)

C. W. SPAYD.

WIRE SCREEN.

No. 263,608. Patented Aug. 29, 1882.



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES W. SPAYD, OF WILKES-BARRÉ, PENNSYLVANIA.

WIRE SCREEN.

SPECIFICATION forming part of Letters Patent No. 263,608, dated August 29, 1882.

Application filed June 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. SPAYD, of Wilkes-Barré, in the county of Luzerne, and in the State of Pennsylvania, have invented certain new and useful Improvements in Wire Screens; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in screens for separating coal and other similar purposes; and it has for its object to provide for rendering such screens more durable than heretofore, as more fully hereinafter specified.

The drawing indicates an elevation, showing my improved screen, in which—

The letter A indicates the frame, which is curved or segmental in shape, although it may be made flat, cylindrical, or of other suitable shape. The said frame is provided with a series of curved wires, B, which are composed of malleable iron, and are secured to the frame by wrapping their ends around the frame, as indicated. The letter E indicates a series of intersecting wires, similarly secured to the frame. The frame is constructed of malleable or soft iron, as well as the wires, and the screen, when thus formed, is packed, in a suitable casing, with leather-scrap, bone-dust, prussiate of potash, or other substance capable at proper heat of converting soft iron into steel or case-hardening it. The casing, with the inclosed screen, is then brought to a proper temperature, usually a cherry-red heat, and kept at such temperature for a suitable length of time to convert the metal into steel or case-harden it. The casing is then removed, the screen is taken out and plunged in cold water, or otherwise suddenly cooled, for the purpose of hardening or tempering it. Thus constructed the screen will resist the wear and tear of service far beyond the ordinary screen.

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

As a new article of manufacture, a metallic screen composed of a suitable frame and intersecting wires, the whole being case-hardened, substantially as specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 7th day of June, 1882.

CHARLES W. SPAYD.

Witnesses:
L. C. KINSEY,
JAS. R. MCKEAN.