

UNITED STATES PATENT OFFICE.

EDWIN J. FIELD, OF SPOKANE, WASHINGTON.

SCREEN-FRONT FOR FIREPLACES.

SPECIFICATION forming part of Letters Patent No. 668,171, dated February 19, 1901.

Application filed June 9, 1900. Serial No. 19,717. (No model.)

To all whom it may concern:

Be it known that I, EDWIN J. FIELD, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Screen-Fronts for Fireplaces; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in screening for fireplaces, and especially to a curtain of flexible or pliable material designed to cover the opening of a fireplace, means being provided for drooping the curtain in the form of a portière, to partially or wholly close the fireplace-opening.

More specifically, the present invention consists in a flexible or pliable curtain-screen for fireplaces, consisting of a frame which may be fastened to the fireplace and supporting the upper margin of the screen, which may be made up of any pliable material, as chains, wire-cloth, &c., and the provision of a winding shaft or drum carried by the frame and about which drum chains or fireproof cords are designed to be wound, which chains or cords are attached to the meeting edges of the curtain and when wound up will cause the curtain to be drooped in portière fashion, a suitable dog or pawl being provided for the purpose of holding the drum from unwinding.

My invention will be hereinafter more fully described and then specifically defined in the appended claim, and is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a front elevation of a fireplace, showing my improved screen closed over the opening to the fireplace. Fig. 2 is a similar view showing the screen-curtain drooped in portière fashion. Fig. 3 is a rear elevation of the mechanism for raising and lowering the same.

Reference now being had to the details of the drawings by letter, A designates a frame-

work, which may be of any shape, preferably conforming to the outline of the opening in the fireplace. Supported by said framework is a curtain B, which may be of any flexible or pliable material, as of pendent chains, string-beads, wire-cloth, &c. At intervals along said framework are mounted pulleys C, and at a location preferably near the middle portion of the framework is mounted a shaft D, having a star-wheel or other suitable turning wheel E secured to one end thereof. Mounted on and rotating with said shaft is a ratchet-wheel F and a gear-wheel F', and pivoted to the casing K is a pawl G, one end of which is designed to normally engage with the teeth of said ratchet-wheel, being held in engagement therewith by means of a spring g, and may be easily thrown out of the path of the teeth of said wheel when it is desired to allow the drum to unwind for the purpose of closing the curtain-screen over the opening to the fireplace.

Mounted on a stub-shaft N in said casing is a gear-wheel M, the teeth of which are normally in mesh with the teeth of the gear-wheel F'. Rotating with said shaft N and gear-wheel M is a pulley Q, having a double groove about its circumference. In one of said grooves a fireproof cord or chain H is adapted to wind after passing over a suitable pulley R, while a second fireproof cord or chain H' passes over a pulley R' and winds in the second groove about the circumference of the pulley Q. Said cords or chains H and H' pass over the pulleys C, which are mounted in said framework, and their ends are secured to the two chains nearest the middle of the screen when the latter is made up of chains or pendent fireproof strings or cords or any material and either passed over or through the curtain-screen, as shown in Fig. 1 of the drawings. When curtains of a woven fabric of a fireproof material are used, the outer ends of the fireproof cords or chains are attached in similar manner to the meeting edges of the curtains.

By turning the star-wheel E, which is mounted on the shaft D, in one direction the screen or curtain may be drawn laterally and drooped in portière fashion, as shown in Fig. 2 of the drawings. By the provision of a pawl and ratchet-wheel it will be observed that the

5 screens may be held either entirely open or partially so, as may be desired, and when it is desired to close the screens it may be easily and quickly done by simply releasing the dog or pawl from the ratchet-wheel, allowing the screen to fall by gravity.

10 It is my purpose to construct these screens and apparatus of such shape that they may be easily attached to fireplaces of various sizes and shapes of openings, and I do not confine myself to any particular design of curtain or frame.

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

A screening for fireplaces comprising in combination with a frame designed to be held to a fireplace, a casing supported by said frame, a pulley mounted in said casing, and

having double grooves about its circumference, the shaft D, the ratchet and gear wheels mounted thereon, a pinion-wheel rotating with said pulley and meshing with said gear-wheel, a pivoted dog engaging said ratchet-wheel, pendent chains hanging from said frame, chains H secured at their outer ends to adjacent pendent chains, pulleys located at different heights on the frame and over which pulleys the chains H pass to and about the double-grooved pulley, as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN J. FIELD.

Witnesses:

G. M. NETHERCUTT,
E. L. DOYLE.