

(No Model.)

D. TRACY.

ROLLING BLOWER FOR FIREPLACES AND GRATES.

No. 474,978.

Patented May 17, 1892.

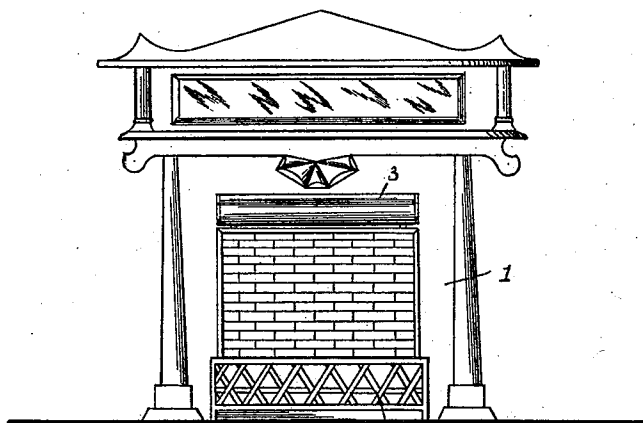


Fig. 1

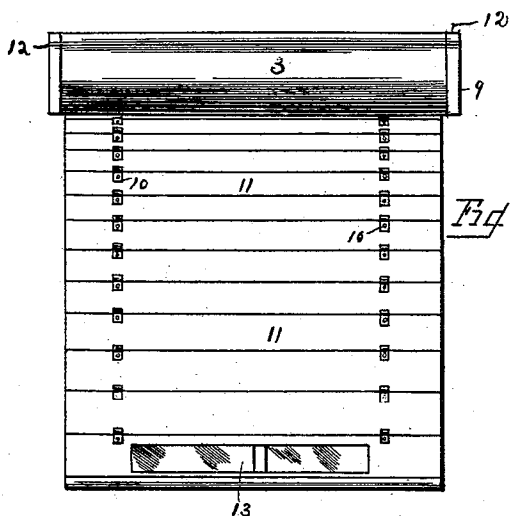


Fig. 2

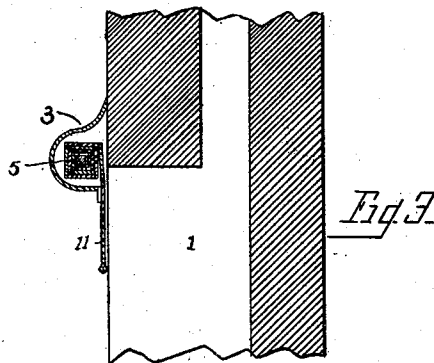


Fig. 3

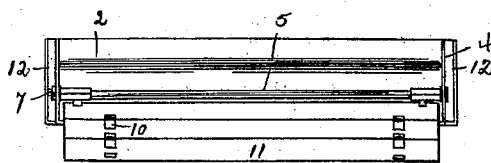


Fig. 4

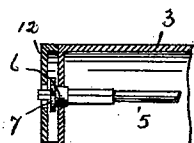


Fig. 5

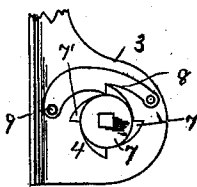


Fig. 6

WITNESSES

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UNITED STATES PATENT OFFICE.

DORIA TRACY, OF TOLEDO, OHIO.

ROLLING BLOWER FOR FIREPLACES AND GRATES.

SPECIFICATION forming part of Letters Patent No. 474,978, dated May 17, 1892.

Application filed February 23, 1892. Serial No. 422,363. (No model.)

To all whom it may concern:

Be it known that I, DORIA TRACY, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in a Rolling Blower for Fireplaces and Grates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 figures of reference marked thereon, which form part of this specification.

My invention relates to a rolling blower for fireplaces and grates, and has for its object to construct a blower capable of being extended to any desired length or be rolled compactly within a casing of a form to add to the appearance of the fireplace in which the grate is located.

With these objects in view the invention consists in a rolling blower comprising a casing, a shaft journaled therein formed with a plurality of rectangular portions, from which is suspended a metal screen formed of transverse slats of graduated widths flexibly joined together, so that the increasing radius of the shaft and slats rolled thereon shall have compensation in the increasing width of the next succeeding slats rolled to maintain the rectangularity of the same and allow of rolling the entire screen upon the roller with a minimum area in cross-section, so that the casing inclosing the same may be of small area in cross-section and of ornamental appearance.

The invention further consists in a shaft journaled in a casing, the shaft being formed either rectangular or with rectangular portions, with a series of transverse slats suspended from the point of angle of the rectangle, the slat and next succeeding three slats being of a width equal to the width of the sides of the rectangular portion with the next succeeding series of four slats of a width equal to the width of the rectangular shaft and the laminated portion of screen thereon.

The invention further consists in the parts and combination of parts hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a front elevation of a fireplace-grate provided with my im-

proved rolling blower. Fig. 2 is a front elevation of the rolling blower and casing detached from the fireplace. Fig. 3 is a sectional end view showing the roller and the laminations of the screen of the blower in rectangular parallel relation upon the roller, and also the ornamental contour of the casing, rendered possible by the small area of space occupied by the roller-screen. Fig. 4 is a rear view of the casing, shaft, and sections of screen secured thereto. Fig. 5 is a longitudinal section of a portion of the casing, showing the rectangular portion of the shaft, the circular portion journaled within the casing, the multi-cam stop-wheel upon the shaft, and the square end of the shaft, upon which a key is fitted to revolve the shaft and wind the slatted screen thereon, the supplemental casing upon the end for concealing the multi-cam wheel being also shown in section. Fig. 6 is an end view of the casing with the supplemental end casing removed to disclose the multi-cam stop-wheel and weighted dog for engaging therewith.

1 designates the fireplace, having a grate 2 located therein.

3 designates a casing formed of sheet metal struck up in ornamental form and of a length to extend across the front of the grate-opening of the fireplace, the end portions 4 being perforated to form bearings for the shaft 5, which extends through the ends and is journaled therein, one end 6 of the shaft being of a length beyond the end of the casing to receive a multi-cam stop-wheel 7, and beyond wheel 7 is formed with a squared end to receive a key by which to revolve the roller, there being a weighted catch 8 pivotally secured to the end of the casing, with the knob end 9 projecting through the front of the casing in convenient reach for operating. The catch-wheel 7 is formed with four cam-faced stops 7', the square face of each of which is in direct alignment with a square face of the rectangular portion of the shaft, so that when the catch engages with the cam-faced stop it holds the shaft in such a position that the depending slat from the roll is in parallel relation with the vertical side of the square roll of slats, thereby causing the screen to hang squarely in front of the grate, as well as relieving the

hangers 10 for the slats 11 from having a torsional strain thereon, as would be the case if the shaft, and consequently the roll thereon, were round. Slat 11 are formed of metal and are of graduated widths, the first series of slats from the shaft being of a slightly greater width than the rectangular portions of the shaft to allow the hangers to fold squarely, and each succeeding series of slats of a width to fold squarely in rolling upon the preceding slat, whereby the roll, with the entire screen rolled thereon, is a compact form, allowing the casing to be of less area in cross-section than were the roll round or, in fact, hexagonal or octagonal, as the roll would increase in size.

In order to present a finished appearance to the ends of the casing, I secure end caps 12 to each end of the casing, which entirely conceal the ends of the roller, there being but the squared end of the roller to which the key is applied visible.

It will be seen that by my arrangement the screen is rolled compactly within a casing that by its small area in cross-section may be of a form to add to the ornamentation of the fireplace, and that all strains upon the hangings or slats, or both, are obviated by the parallelism of the slats when rolled.

In order to afford a view of the fire when the screen or blower is suspended fully, I in-

sert transparent non-fusible plate 13, preferably of mica, in the bottom slat.

What I claim is—

1. In a rolling blower for fireplaces and grates, a casing, a shaft journaled therein formed with rectangular portions, a slatted screen suspended from the angle of the shaft, the slats of the screen being of graduated sizes in series to allow each series to fold in rectangular laminated order when rolled upon the shaft.

2. In a rolling blower, a casing, a shaft journaled therein having a rectangular formation, a slatted screen suspended from the angles of the shaft, the slats of the screen being of graduated sizes in series to allow each series to fold in rectangular laminated order when rolled upon the shaft, a multi-cam stop-wheel upon the shaft, the square faces of each of which are in alignment with a rectangular side of the shaft, and a stop pivoted to the casing and engaging the cam.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

DORIA TRACY.

Witnesses:

WILLIAM WEBSTER,
CARROLL J. WEBSTER.