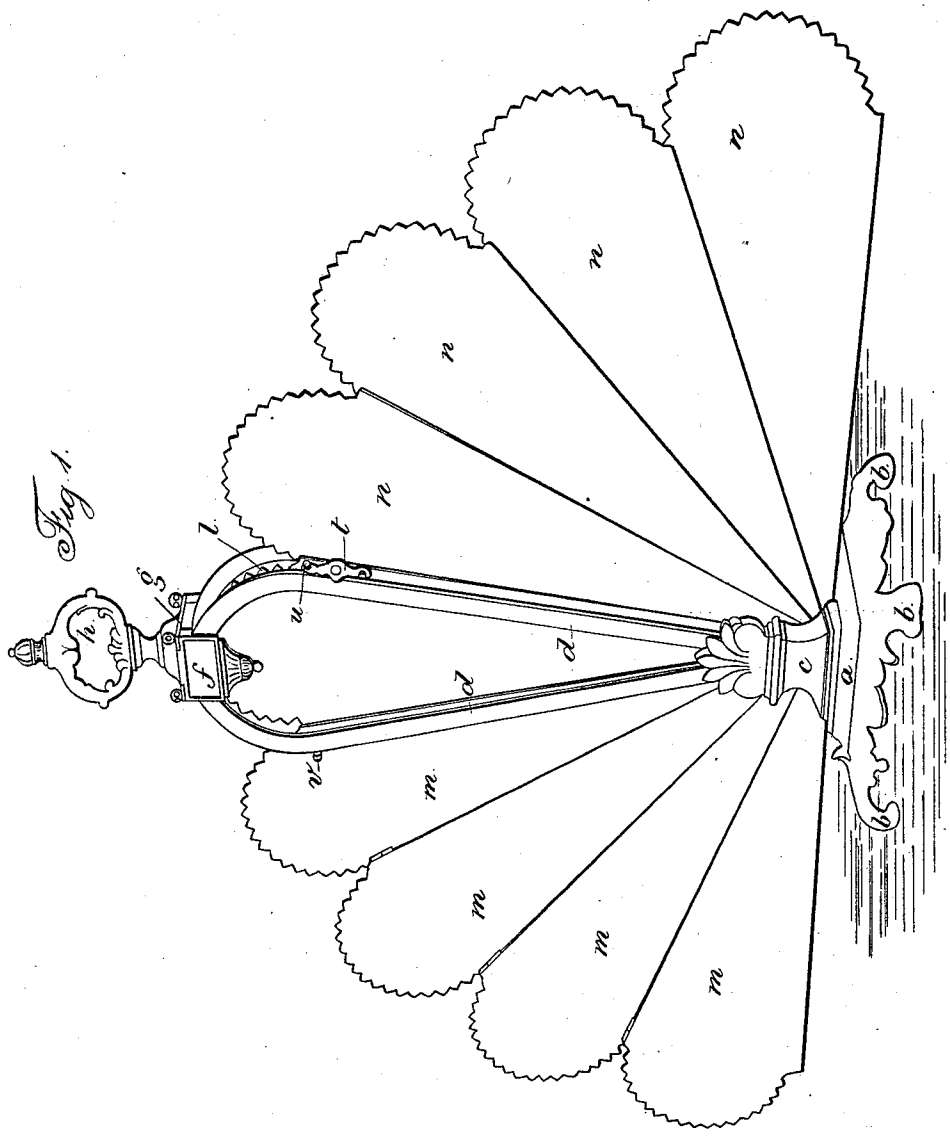
(No Model.) 2 Sheets—Sheet 1.

J. H. WHITE.

FIRE SCREEN.

No. 300,930. Patented June 24, 1884.

Fig. 1.



Witnesses:
J. Stair
Chas. H. Smith

Inventor:
James H. White
per Lemuel W. Serrell
Atty

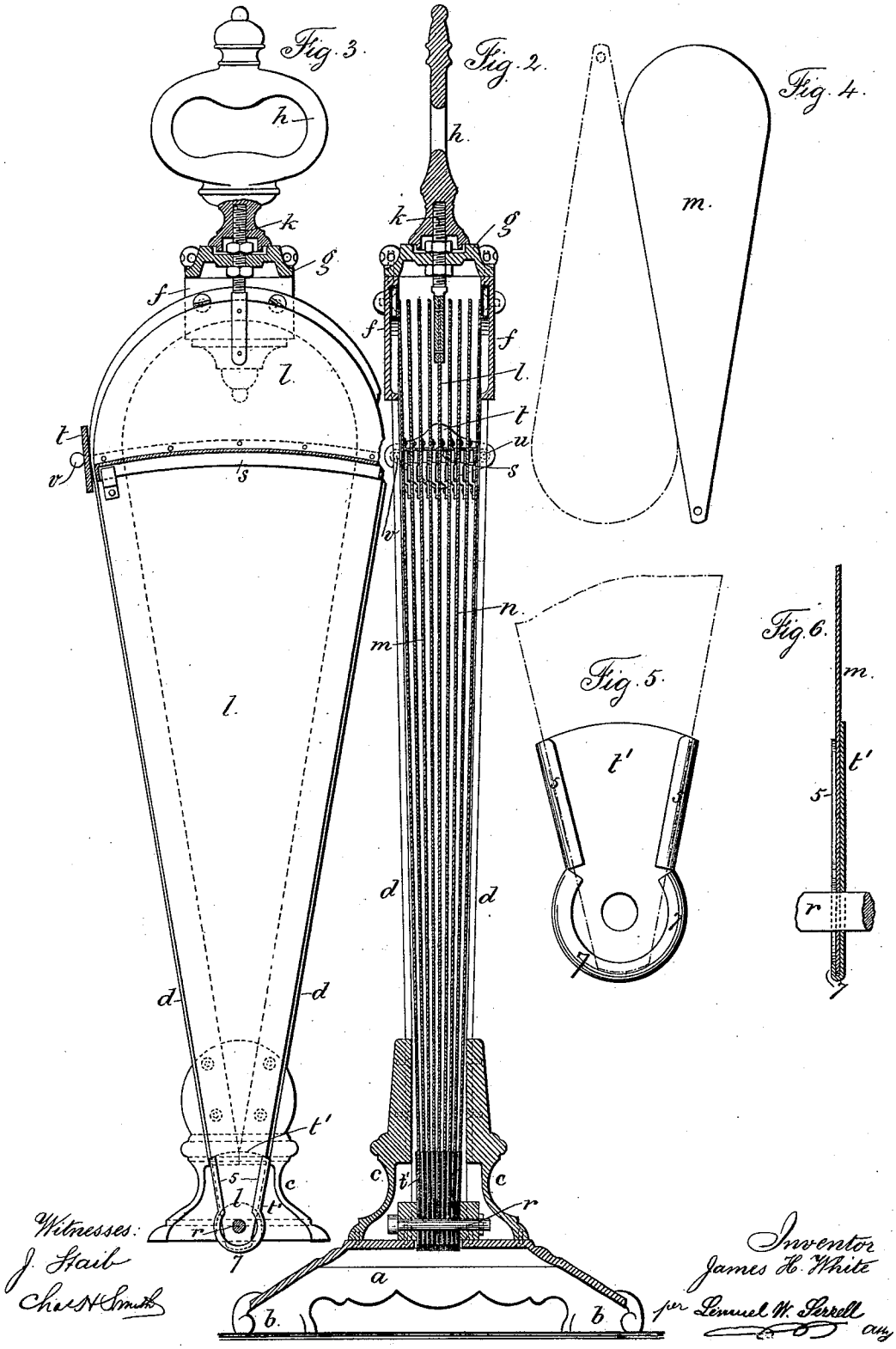
N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

J. H. WHITE.

FIRE SCREEN.

No. 300,930. Patented June 24, 1884.



N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JAMES H. WHITE, OF NEW YORK, N. Y., ASSIGNOR TO THE MANHATTAN BRASS COMPANY, OF SAME PLACE.

FIRE-SCREEN.

SPECIFICATION forming part of Letters Patent No. 300,930, dated June 24, 1884.

Application filed May 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. WHITE, of the city and State of New York, have invented an Improvement in Folding Fire-Screens, of which the following is a specification.

Fire-screens have been made to fold up like a fan. My present invention relates to improvements in the construction of the frame that holds the folding plates, whereby greater strength and lightness are obtained at less cost. The frame, instead of being cast, is composed of wrought metal, extending up to a central clip-piece and handle, so that the heavy casting at the upper part of the frame, as heretofore employed, is dispensed with.

In the drawings, Figure 1 is a perspective view of the screen complete. Fig. 2 is a vertical cross-section, and Fig. 3 is a vertical section at right angles to Fig. 2. Fig. 4 is a diagram showing the manner of cutting out the screen-plates. Fig. 5 is an elevation, and Fig. 6 is a section, of the clip-plates for the screen-plates at the pivot-bolt.

The base *a* is usually quadrangular, with feet *b* at the angles, and these are of an ornamental character. The pedestals *c c* are hollow and fastened to the base *a* by screws, and in the back faces of the pedestal which come opposite to each other are recesses for the reception of the lower ends of the frames *d*, which frames are of wrought metal and preferably flattened tubes. These frames are firmly screwed into the recesses of the pedestals. These frames diverge and are semicircular, or nearly so, at the upper end. Each frame is preferably of one piece of metal bent at the semicircular top and with the converging sides; but each frame may be in two pieces united at the top of the arch. The top parts of the arches are united by a clip formed of the pendants *f*, to which the arch-pieces are firmly screwed, and the base *g* of the handle *h*, to which base *g* the pendants *f* are firmly united. The central screw, *k*, that extends down from the handle *h*, is split into a fork for receiving the upper end of the central plate, *l*, of the fan-screen. The plate *l* and the plates *m n* are formed of metal with inclined edges that are nearly radial lines from the bolt *r*, upon which such plates swing. The plates usually have ornamental rounded upper ends and are more or less open. There is a guide, *s*, upon each plate, formed as an arc of a circle, in which a finger upon the next plate slides as the fan-shaped screen is opened out for use, or as it is closed up within the frames when not in use. The plates *m* are the same in number as the plates *n*, so that the fan-shaped screen will open to the same extent at each side of the central stationary plate, *l*. When closed up, the plates are secured by hooks *t* upon studs *n*, that hook over studs *v* at opposite sides of the frame, and prevent the plates falling when not in use or when the screen is moved from place to place. The ends of the bolt *r* pass into the bearing-pieces secured to the base *a*.

Heretofore it has been usual to employ filling-pieces or washers around the bolt *r* to keep the plates *l m n* at the proper distances apart; but these do not strengthen the narrow lower ends of the plates, and there is considerable waste material in cutting out the plates with a round end through which the bolt passes. I make the edges of the plates *l m n* straight, so that they can be cut out without waste from sheet metal, as seen in Fig. 4, and I provide a clip-plate, *t'*, made of sheet metal, with its edges turned over at 5 to grasp the edges of the plate *l* or *m* or *n*, and with the edges of its circular portions folded over, as at 7, so as to thicken the clip-piece around the bolt *r*, and keep the plates of the fan separate from each other. The elevation, Fig. 5, and section, Fig. 6, show the manner in which this clip-plate *t'* is applied to the plates of the screen.

I am aware that a fire-screen has been made of side frames cast with the base portion and connected at their upper ends. This I do not claim. In use it is found that these side frames are very liable to bend and prevent the fan-sections turning up freely. By the use of wrought-metal side frames made separate from and attached to the base and to the clip at the top I am able to employ tubular side frames that are very light, strong, and ornamental, or to use wrought-metal bars of any suitable sectional form bent to shape and secured as aforesaid.

I claim as my invention—

1. The combination, with the folding screens,

base, and pedestals, of the separate frames of wrought metal received at their lower ends into recesses in the pedestals and secured thereto by screws, and the clip-piece attached to the tops of the frames and connecting them to each other, substantially as set forth.

2. The combination, with the plates *l m n*, of the wrought-metal side frames, the base *a*, pedestals *c*, recessed to receive the lower ends of the side frames, the pendants *f*, and base *g*, uniting such side frames, the handle *h*, the split stud supporting the plate *l*, and the bolt that connects the lower ends of the plates to the base, substantially as set forth.

3. In combination with the folding screens, base, and pedestals, the side frames formed of bent tubes secured to the pedestals at the lower ends, and the clip-piece uniting the side frames at the top, substantially as specified.

4. The combination, with the plates *l m n*, base, and bolt *r*, of the clip-plates *t'*, folded over at their edges to grasp the lower parts of such plates, and to thicken the circular portions of the clip-plates around the bolt, substantially as set forth.

Signed by me this 12th day of May, A. D. 1883.

JAMES H. WHITE.

Witnesses:

GEO. T. PINCKNEY,

WILLIAM G. MOTT.