(No Model.)

D. R. VAN RIPER.

REFINING STOVE FOR PHOTOGRAPHERS.

No. 564,729. Patented July 28, 1896.

Fig. 1.

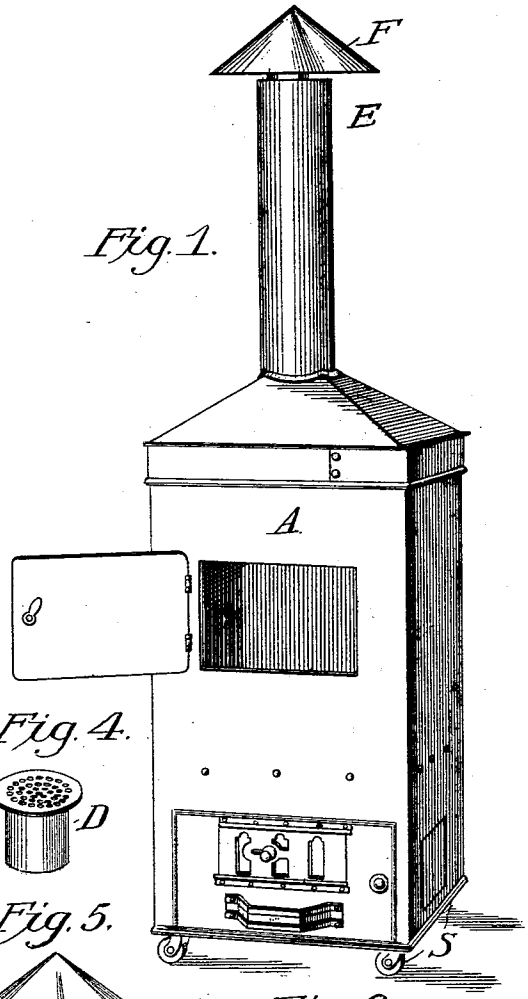


Fig. 2.

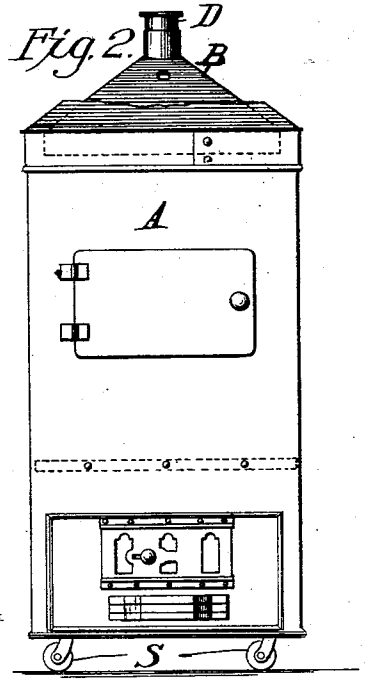


Fig. 3.

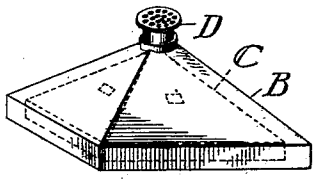


Fig. 4.

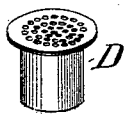


Fig. 5.

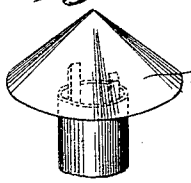


Fig. 6.

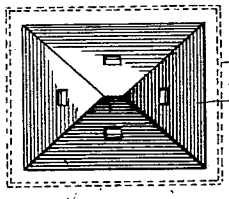


Fig. 8.

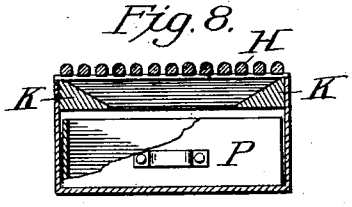
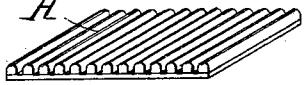


Fig. 7.



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UNITED STATES PATENT OFFICE.

DANIEL ROMAINE VAN RIPER, OF PATERSON, NEW JERSEY.

REFINING-STOVE FOR PHOTOGRAPHERS.

SPECIFICATION forming part of Letters Patent No. 564,729, dated July 28, 1896.

Application filed March 23, 1896. Serial No. 584,586. (No model.)

To all whom it may concern:

Be it known that I, DANIEL ROMAINE VAN RIPER, of the city of Paterson, county of Passaic, and State of New Jersey, have invented a new and useful Improvement in Refining-Stoves for Photographers, of which the following is a specification.

Most photographers preserve their waste paper used in printing photographs and express it in bundles or boxes to refiners for the purpose of having the gold or silver or other metals extracted therefrom. This waste paper accumulates rapidly, is very cumbrous, taking up a great deal of room, and is expensive to express or send by messenger to the refiners.

The object of my invention is to provide a furnace or stove for photographers in which they can burn their waste paper and reduce it to ashes. When reduced to ashes, it takes up but little room, and a great quantity of paper can be burned before the ash-pan of the stove is full. These ashes may be compressed into a small box or package, and much of the trouble and expense of storing, packing, and shipping the paper may thus be avoided. Some photographers, it is true, have used an ordinary stove for this purpose; but the object of my invention is to produce a stove or furnace that will be neat, compact, and especially adapted for the purpose.

The invention consists in the peculiar construction and novel arrangement of the various parts, which are shown in the accompanying drawings, which form a part of this specification, and which will be hereinafter described, and set forth in the claim.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a view showing the stove complete. Fig. 2 is a view of the stove, part broken away, with a dotted line showing the position inside of the cover of an inner pyramid-shaped portion which is secured to the inside of the cover, leaving a space between it and the cover for the purpose of draft and permitting the smoke to escape to the chimney portion. Fig. 3 represents said cover, the dotted lines on cover indicating the position of the inner pyramid, the same as in Fig. 2. A cap with a perforated top fits inside of the pipe portion of the cover. Fig. 4 is a view of said cap with perforated top. Fig. 5 is a view of upper portion of pipe provided with a cone, same as shown in Fig. 1, which pipe is adapted to pass over and outside of the pipe portion of cover shown in Fig. 3. Fig. 6 is a view of the pyramid which is secured on the inside of covering shown in Fig. 3. Fig. 7 is an illustration of grate composed of semicircular grate-bars; and Fig. 8 is a view, part sectional, of the lower part of the stove, showing the inclined strip on the inside of the wall of the stove on which the grate rests.

In the drawings, A represents the body portion of the stove; B, the cover; C, pyramid inside of cover; D, the cap, with perforated top, which fits inside of the pipe on the cover; E, the top pipe, which fits over the pipe on the cover; F, cone on top of pipe; H, the grate-bars; K, the inclined strips secured around the inside of the body of the stove, upon which the grate-bars rest; P, the ash-box, and S the casters under the stove.

The photographic paper is placed in the stove upon the semicircular grate-bars and is ignited. The grate-bars are a slight distance apart and the ashes fall through between said grate-bars into the ash-box P. As the strip around the inner wall of the stove has a sloping face inclined toward the ash-box and the grate rests upon the upper portion or portions of said strip, the ashes falling between said grate-bars will slide down said strip into the ash-box P. No part of the ashes can fall outside of the ash-box, as the inclined strips K project over the edges of the ash-box. The smoke strikes the inner pyramid C, causing any particle of the paper or ashes to be precipitated to the grate, and the smoke passes between the inner pyramid and the cover and through the perforated cap to the upper portion of the pipe and out between the top of said pipe and cone which surmounts it. The cap with a perforated top further prevents the escape of any paper, ashes, or particles thereof as far as possible and insures the saving of all of the ashes. The ashes may be accumulated in the ash-box until a sufficient amount has been obtained to send to the refiner. In this ash-box the ashes of many barrels of paper may be accumulated, so that its convenience and economy is obvious.

The casters S permit the stove to be moved from one place to another with facility.

While any suitable material may be used in the construction of my refining-stove I prefer to construct it of ordinary sheet-iron.

I have not constructed any stoves with the gas-jets nor with other obvious burners or wicks which might be used for the purpose, as paper is readily ignited by use of a match, and this method is more economical. Consequently none of these methods of lighting have been shown in the drawings, and I do not now claim them, but mention them for the purpose of preventing others from applying and obtaining a patent for such methods.

The use of an ordinary stove for burning this paper is not advantageous or economical, because the paper or ashes are apt to be carried away by the draft, (the ordinary stove not being constructed for the purpose,) and for many other obvious reasons.

With this description of my invention, what I claim is—

As a new article of manufacture a photographer's stove consisting of the body portion A, cover B, pyramid C adapted to be secured inside of the cover B leaving a space between the two, the cap D having a perforated top and adapted to fit inside of the pipe or cover, the upper pipe portion E adapted to fit over and around the cap D and pipe or cover, and cone F secured to the upper pipe, the grate H composed of semicircular grate-bars a slight distance apart and secured together in any appropriate manner, a shoulder or strip secured to the inner walls of the body of the stove adapted to support the grate, said strips K having a sloping face inclined toward and extending over the edges of the ash-box, the ash-box P and the casters S, all constructed substantially as shown and described and for the purposes specified.

D. ROMAINE VAN RIPER.

Witnesses:
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