(No Model.) 2 Sheets—Sheet 1.

C. H. BOECK.

OIL STOVE.

No. 500,367. Patented June 27, 1893.

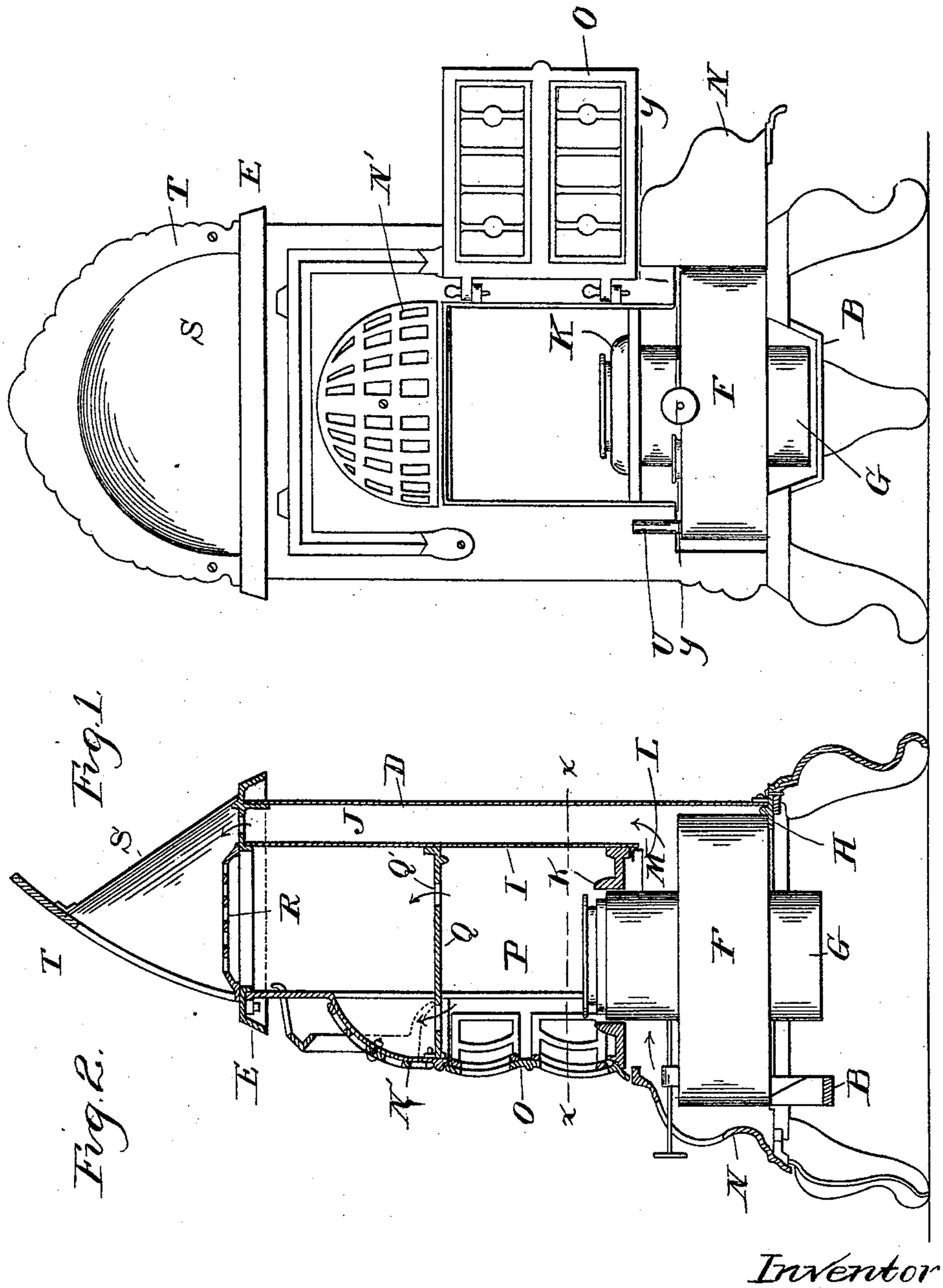

Fig. 1.

Fig. 2.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

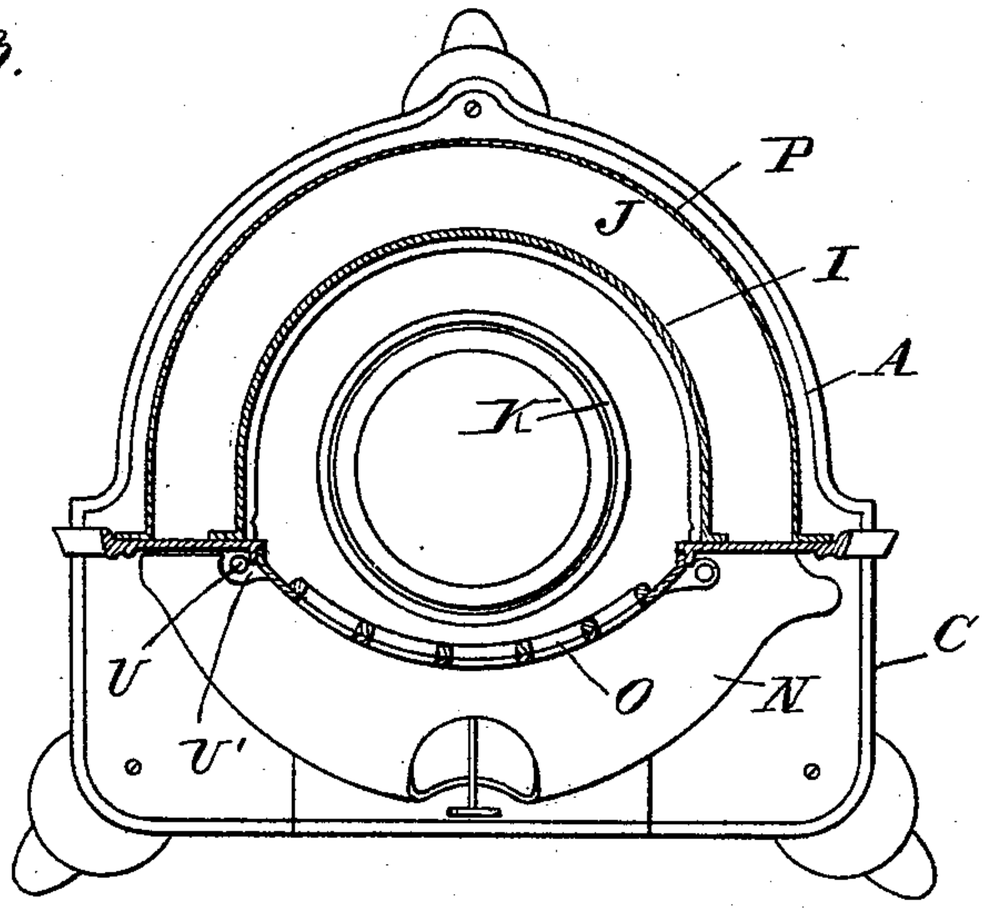
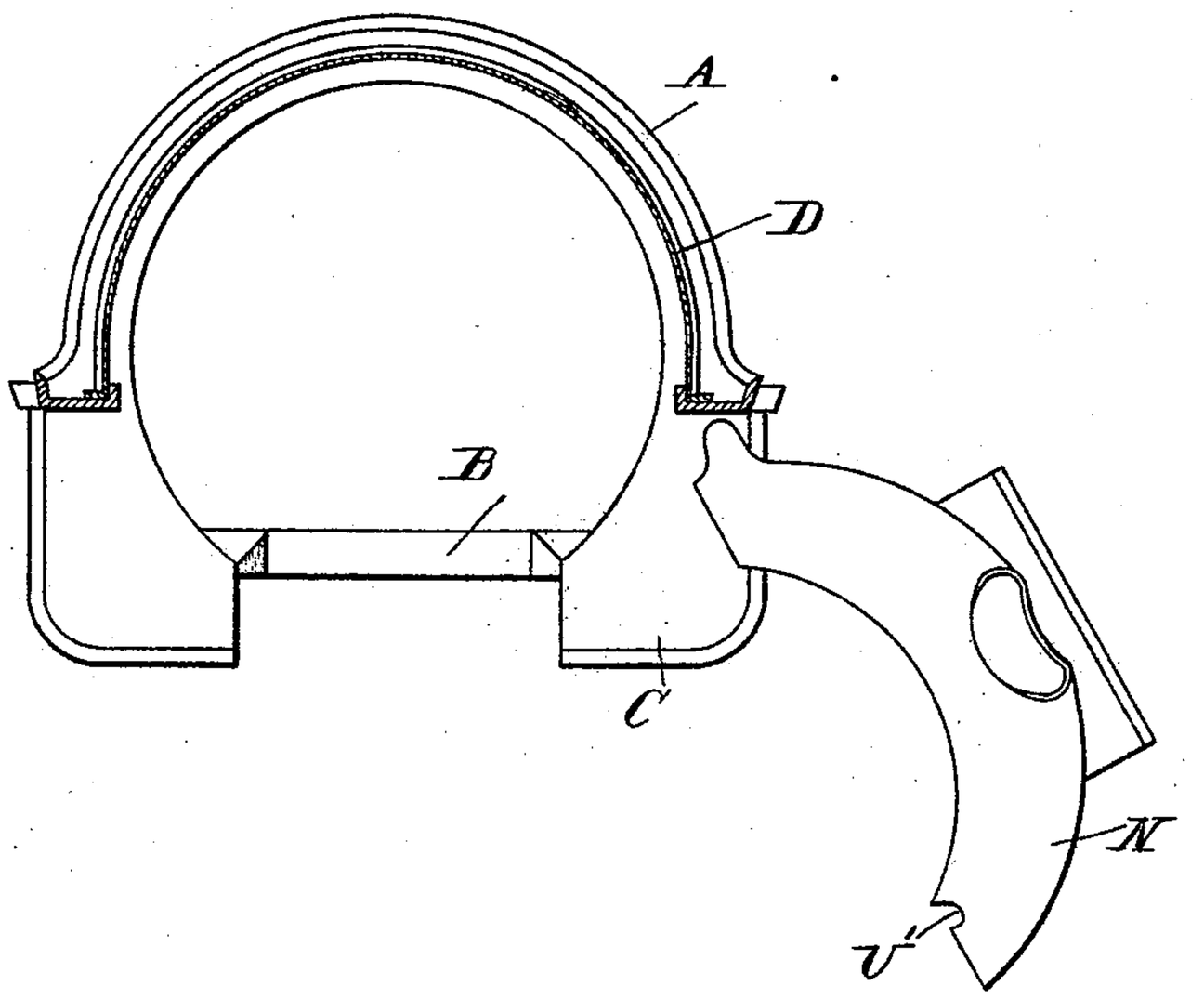


Fig. 1.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES H. BOECK, OF JACKSON, MICHIGAN, ASSIGNOR TO HUGH S. SMITH, OF SAME PLACE.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 500,367, dated June 27, 1893.

Application filed January 7, 1893. Serial No. 457,645. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BOECK, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Oil-Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the peculiar construction, arrangement and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a front elevation of my improved stove. Fig. 2 is a vertical, central, longitudinal section thereof. Fig. 3 is a section on line *x x* of Fig. 2. Fig. 4 is a section on line *y y* in Fig. 1.

The base A is in substantially the shape of a ring divided in front, the two ends being connected together by a depending stirrup B.

C is a flat front extending vertically from a point slightly in front of the center of the base, as shown in Fig. 4.

D is a semi-circular casing forming the back, being secured at its forward ends to the outer edges of the front.

E is the top having a square front and a semi-circular back, and secured to the top of the front and back of the stove, as plainly shown in Fig. 2.

F is the ring shaped oil tank having the burner tube G extending above and below centrally thereof, and of a size to be supported upon the flange H, formed on the inner edge of the ring shaped base, shown in Fig. 4. The stirrup B is of such a distance below the bottom of the base as to allow the downward extension of the burner tube to readily pass. The burner tube at its upper end is provided with the usual burner having suitable wick raising and lowering devices, and a central air passage to supply air for combustion.

I is an inner casing concentrically arranged with the back D, but separated therefrom, being secured at its ends to the front, as shown in Fig. 3.

Between the back and the casing I is a vertical air flue J, extending from near the top of the tank to the top of the stove.

K is the burner ring or cone, supported upon flanges L formed at the lower edge of the inner face of the casing I and fitting tightly around the wick tube, so as to form a tight partition below the burner, forming above the tank a lateral air flue M extending from the front of the stove between the tank and the ring K to the rear of the stove and connecting with the bottom of the vertical flue J.

The tank is held in the stove by means of the door N pivoted on the base and of suitable shape to embrace the outer edge of the tank. This door is made of open work or suitably apertured to allow the air to enter the lateral flue M. Above this door is a second closed door O making a tight joint with its inner edge against the outer edge of the ring K and at its upper end against the lower end of the curved bonnet N′. This bonnet with the two doors form a central swell front or bay.

Above the burner is the combustion chamber P, which is divided centrally by a plate Q, provided with a series of marginal apertures Q′. At the top the products of combustion find exit through the central aperture R and are deflected to the front by the inclined deflector hood S which terminates at its forward end in an arched shape ornament T. The parts being thus constructed, the burner being lighted, the hot air and the products of combustion will pass up into the combustion chamber, striking the plate Q and be deflected to the side, finding exit through the apertures Q′ into the upper part of the combustion chamber, part passing out through the apertured bonnet N′ and part through the aperture R in the top of the stove. The heat in the combustion chamber will quickly heat the air in the flue J and cause a rapid circulation of air, coming in through the front into the horizontal flue M, formed above the tank and up through the flue J, being deflected to the front of the hood S. Thus the back of the stove will be kept in a comparatively cool condition at all times, while the rapid circulation of heated air will be effected and this hot air will be deflected to the front of the stove.

U is a tube containing the oil indicator, which tube I arrange on the tank outside of the stove beside the front, and I provide the door N with a corresponding curved bearing

U′ to allow the door to be closed without interfering with the tube U. Thus, I am enabled to have my oil indicator on the outside of the stove, where it can readily be seen, and thus prevent the danger of the oil becoming too low and the stove smoking, at the same time guarding this tube against danger of breakage.

What I claim as my invention is—

1. In an oil stove, the combination of the casing, the oil tank at the base, a central burner extending above the tank, the imperforated burner ring around and in contact with the burner and separated from the tank to form a lateral flue between the two, and a vertical flue at the rear only of the casing with which the lateral flue connects at the base, substantially as described.

2. In an oil stove, the combination of the base, the top, the casing comprising a flat front, and a semi-circular back, an oil tank supported in the base, a burner therein, a combustion chamber above the burner, a casing concentrically arranged with the back only forming a vertical flue between the burner ring supported around and in contact with the burner above the tank, forming a lateral flue connecting with the base of the vertical flue, substantially as described.

3. In an oil stove, the combination of a base divided in front, of a depending stirrup connecting the ends of the base below, a door carrying the complementary section of the base, and a tank having a burner tube extending above and below, substantially as described.

4. In an oil stove, the combination with the base and casing, the oil tank and burner, of a combustion chamber above the burner having a centrally extending bay or swell, a partition across said combustion chamber, extending into the bay, marginal apertures in the partition, an apertured cap for the bay, an apertured top, and a hood on the top above the cap having an open front and inclined back substantially as described.

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

CHARLES H. BOECK.

Witnesses:

N. L. LINDOP,

M. B. O'DOGHERTY.

Correction in Letters Patent No. 500,367.

It is hereby certified that the name of the assignee in Letters Patent No. 500,367, granted June 27, 1893, upon the application of Charles H. Boeck, of Jackson, Michigan, for an improvement in "Oil-Stoves," was erroneously written and printed "Hugh S. Smith," whereas said name should have been written and printed *Hugh L. Smith;* and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 1st day of August, A. D. 1893.

[SEAL.]

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents.