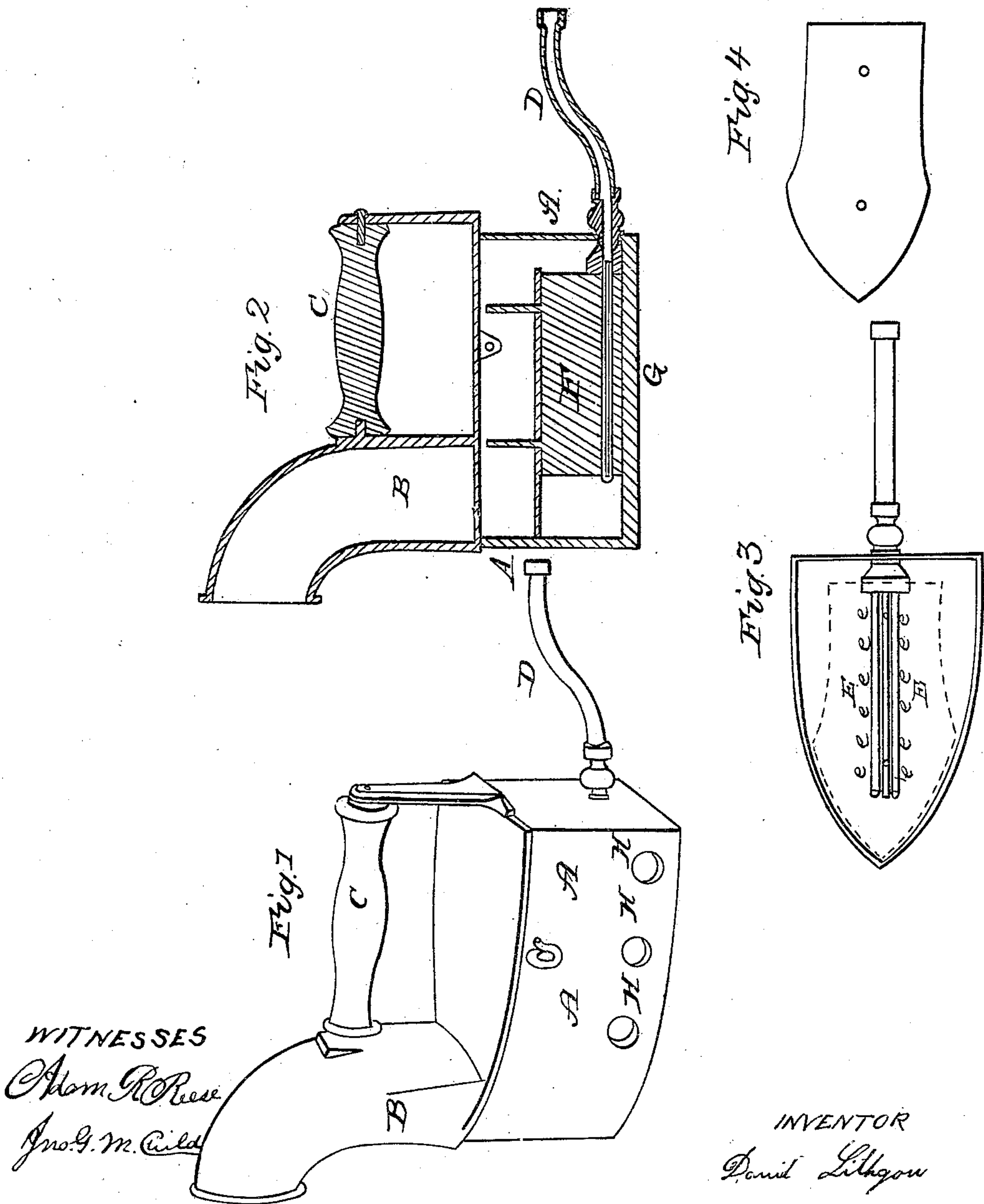


D. LITHGOW.

Flat Iron.

No. 21,891.

Patented Oct. 26, 1858.



WITNESSES
Chas. R. Reed
Geo. G. M. Child

INVENTOR
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UNITED STATES PATENT OFFICE.

DAVID LITHGOW, OF PHILADELPHIA, PENNSYLVANIA.

FLAT-IRON.

Specification of Letters Patent No. 21,891, dated October 26, 1858.

To all whom it may concern:

Be it known that I, DAVID LITHGOW, of the city of Philadelphia and State of Pennsylvania, have invented a new and useful
5 Improvement in the Construction of Flat-Irons; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawing, in which—

10 Figure 1 is a perspective view of my improvement. Fig. 2 a vertical section of the same. Fig. 3 a horizontal section. Fig. 4 a reverberating plate detached.

The object of my improvement is the employment of ordinary gas, introduced into the interior of the iron by a flexible tube, for the heating of the iron while used for smoothing purposes. Heretofore gas has
15 been applied to flat-irons for such purposes by causing the gas to be thrown from the interior jets against the sides of the iron. In those irons it was also necessary to have side holes for the admission of air to support combustion and there was a constant
20 tendency for the flame to escape through these side draft-holes, thus causing great risks to the person operating and to the articles being smoothed.

My improvement has for its objects the
25 more economical application of the heat and the avoidance of the risks just mentioned.

My iron consists of a hollow, triangular metallic box A A with a chimney B, and a

non-conducting handle C. The gas is introduced at the rear of the box A A, through
35 a flexible tube D, and thence through two tubes E E about one-eighth of an inch in diameter having a series of jets *e, e, e, e*, along their inner side. Between these tubes E E and at a distance of about one-sixteenth
40 of an inch from them is placed a vertical metallic plate F from one-and-a-half to two inches high and extending the whole length of the tubes E E. This plate F is cast onto the bottom G of the box A A. The function
45 of this plate is to receive the direct heat from the blaze of the burning jets and to conduct it to the bottom, the air to supply combustion being admitted through a series of apertures H H H, which are placed on the sides
50 of the iron and in a direction opposite to that of the jets and there is no danger of the burning gas escaping. Thus all danger from the escape of flame is prevented and
55 the heat is economized.

Having thus described my improvement; what I claim as my invention and desire to secure by Letters Patent is—

The combination of the two jet pipes E E and the heating plate F in the manner substantially as above described.
60

DAVID LITHGOW.

Witnesses:

ADAM R. REESE,
JNO. G. M. CHILD.