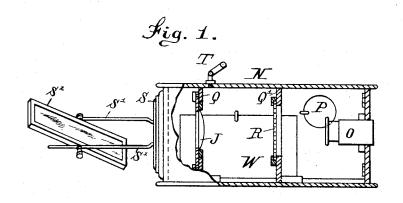
(No Model.)

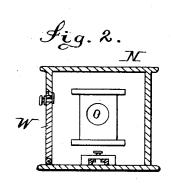
W. F. KIRTLEY & C. R. SPURGEON.

COPYING AND PRINTING INSTRUMENT.

No. 342,610.

Patented May 25, 1886.





WITNESSES:

L.W. Show. Golon Chemon.

INVENTOR

BY

Munn V

ATTORNEYS.

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

United States Patent Office.

WILLIAM F. KIRTLEY AND CHARLES R. SPURGEON, OF LACLEDE, MISSOURI.

COPYING AND PRINTING INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 342,610, dated May 25, 1886.

Application filed March 2, 1885. Serial No. 157,579. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM F. KIRTLEY and CHARLES R. SPURGEON, both of Luclede, in the county of Linn and State of Missouri, 5 have invented a new and Improved Copying and Printing Instrument, of which the following is a full, clear, and exact description.

The object of our invention is to provide a new and improved instrument for printing

ic from negatives.

The invention consists in the construction, arrangement, and combination of parts and details, as will be fully described and set forth hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal sectional elevation 20 of our copying and printing instrument, and Fig. 2 is a cross-sectional elevation of the same.

In the embodiment of our invention we employ a box, N, in one end door of which a telescopic tube, O, is arranged, which holds a 25 lens. An opening is formed in the side of the box, and is closed by a door, P, through which opening the hand can be inserted to adjust the tube O.

In the box N two sliding frames or parti-30 tions, Q and Q', are arranged, and in the former

the lens J is placed, while in the latter frame, Q', the negative R is placed. The door W is provided for shifting the frames Q and Q', to assist in focusing. A revolving ring, S, is on the end of the box N, and on the said ring two 35 bars, S', are held, between which a reflector, S², is pivoted, which shows the light through the lens J upon the negative. T is a handle for carrying the box. The sensitized paper is placed in a dark room, and after the tube O 40 and the partitions or frames Q and Q' have been adjusted to give a proper focus the light is reflected by the mirror S² through the condensing-lens J, the negative R, and the lens O upon the sensitized paper.

Having thus fully described our invention, we claim as new and desire to secure by Let-

ters Patent-

The combination, with the box having in one end a telescopic tube and at its other end the 50 mirror, with its supporting-frame rotatably connected to said box, of the lens-holding frame Q and the negative-holding frame Q', said frames being relatively adjustable, substantially as and for the purpose set forth.

WILLÎAM F. KIRTLEY. CHARLES R. SPURGEON.

Witnesses:

OSCAR F. LIBBY, J. B. HURLBUT.