

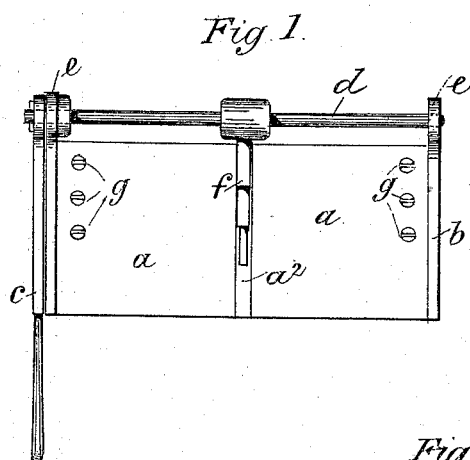
(No Model.)

A. SWAN.

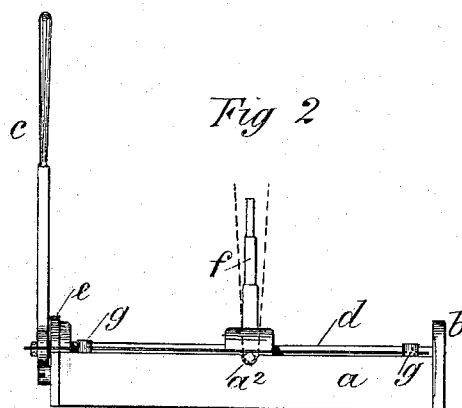
DEVICE FOR FORMING TERMINAL WIRES FOR ELECTRIC LAMPS.

No. 263,623.

Patented Aug. 29, 1882.



*Fig 3*



*Fig 4*

Witnesses:

*E. L. White*

*C. J. Hedrick*

Inventor

*Alfred Swan*  
by *W. H. Pollok*  
his attorney

# UNITED STATES PATENT OFFICE.

ALFRED SWAN, OF GATESHEAD, COUNTY OF DURHAM, ENGLAND.

## DEVICE FOR FORMING TERMINAL WIRES FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 263,623, dated August 29, 1882.

Application filed July 20, 1882. (No model.) Patented in England June 19, 1882, No. 2,898.

*To all whom it may concern:*

Be it known that I, ALFRED SWAN, a subject of the Queen of Great Britain, and residing in the borough of Gateshead, in the county of Durham, England, have invented certain Improvements in Apparatus for Cutting and Bending the Terminal Wires for Incandescent Electric Lamps, or for other purposes, (for which I have obtained a patent in Great Britain, No. 2,898, dated 19th June, 1882,) of which the following is a specification.

My invention relates to an apparatus for cutting and bending wires into a U form, and is especially adapted for the cutting and bending the terminal wires for incandescent electric lamps.

Figure 1 of the accompanying drawings represents in plan, and Fig. 2 in front elevation, an apparatus constructed according to my invention.

The said apparatus consists of a bed-plate, *a*, having at one end a stop, *b*, and at the other end a cutter-lever, *c*, affixed to a spindle, *d*, as a center, the said spindle extending along the side of the bed-plate *a* and turning on lugs thereon. Affixed to the said spindle *d* half way between the cutter-lever *c* and the stop *b* is a cylindrical rod, *f*, whose length is situated at right angles to the length of the spindle *d*. The bed-plate *a* is furnished with rests *g*, into which the wire, Fig. 3, to be cut and bent is placed when the cutter-lever *c* is in the raised position represented in Fig. 2, one end of the wire abutting against the stop *b* and the other end passing beneath the cutter-lever *c*. On depressing the said cutter-lever *c* the said wire is cut to the proper length, and the cylindrical piece *f* at the same time descends into the semi-cylindrical recess *a*<sup>2</sup> in the bed-plate *a*, and thereby bends the wire at its center and forms it into a U shape, as indicated in dotted lines in Fig. 2. Fig. 4 shows the bent wire removed from the apparatus.

The apparatus may be formed to cut and bend wire of but one thickness or wires of two

or more different thicknesses. The drawings represent an apparatus adapted for cutting and bending wires of three different thicknesses, the cylindrical piece *f* being made with portions of three different diameters, with corresponding rests, *g*, to accommodate three different thicknesses of wire.

I claim as my invention—

1. In apparatus for bending wires for incandescent electric lamps or other purposes, the combination of the recessed bed-plate *a* and bending-piece *f*, adapted for bending wire of one thickness or wires of different thicknesses, as described and illustrated.

2. In apparatus for bending wires for incandescent electric lamps or other purposes, the combination of a cutter-lever, *c*, and bending-piece *f*, suited for bending wire of one thickness or wires of different thicknesses, the said parts operating together upon a recessed bed-plate, *a*, as described and illustrated.

3. In apparatus for bending wires for incandescent electric lamps or other purposes, the combination of the cutter-lever *c* and bending-piece *f* with a recessed bed-plate and a stop, *b*, to effect the cutting and bending of wire of one thickness or wires of different thicknesses, as described and illustrated.

4. In apparatus for bending wires for incandescent electric lamps or other purposes, the combination of the cutter-lever *c*, bending-piece *f*, spindle *d*, recessed bed-plate *a*, rests *g*, and stop *b*, for cutting and bending wire of one thickness or wires of different thicknesses, as described and illustrated.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED SWAN.

Witnesses:

ROBT. SPENCE WATSON,  
*Solicitor, Newcastle-on-Tyne.*

R. W. JOHNSON,  
*Clerk to U. S. Consul, Newcastle-on-Tyne.*