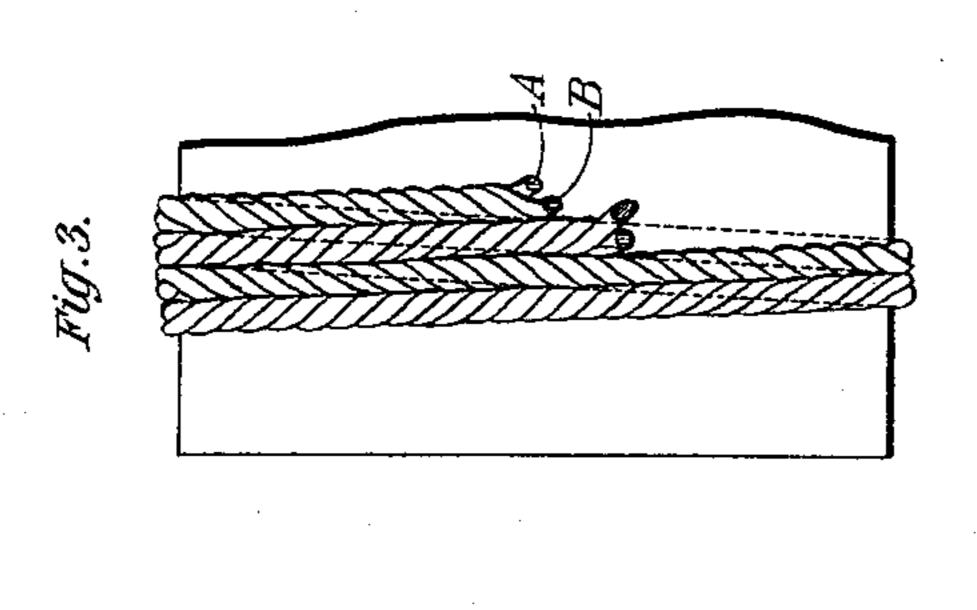
(No Model.)

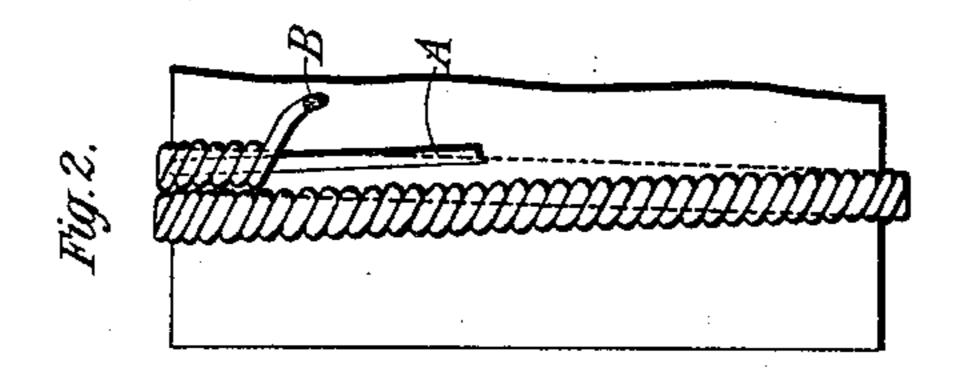
## E. DE ZUCCATO.

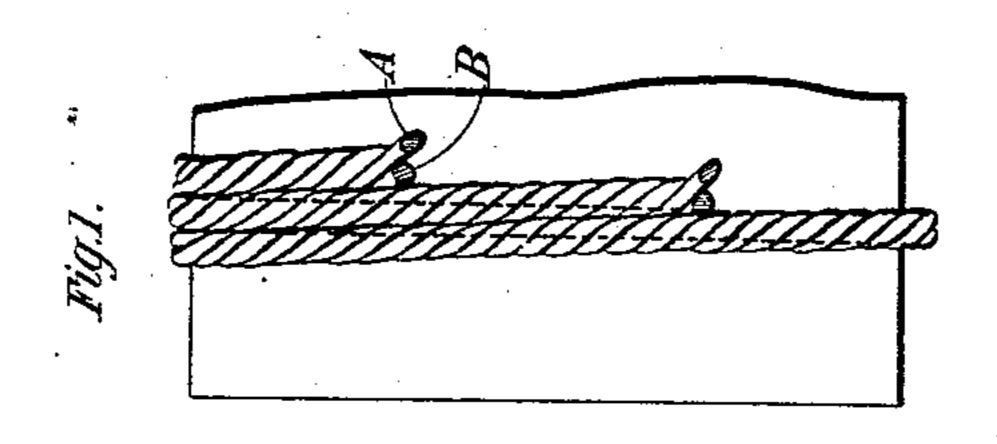
APPARATUS FOR THE MANUFACTURE OF STENCILS.

No. 498,149.

Patented May 23, 1893.







Witnesses: flatherford.

Matternett.

Enjenis de Zuccato.

gruedon Torres.

## United States Patent Office.

EUGENIO DE ZUCCATO, OF LONDON, ENGLAND.

## APPARATUS FOR THE MANUFACTURE OF STENCILS.

SPECIFICATION forming part of Letters Patent No. 498,149, dated May 23, 1893.

Application filed September 21, 1892. Serial No. 446,402. (No model.)

To all whom it may concern:

Be it known that I, EUGENIO DE ZUCCATO, manufacturer, a subject of the King of Italy, and a resident of London, England, have in-5 vented a certain new and useful Improved Method of and Apparatus for the Manufacture of Stencils, of which the following is a specification, reference being had to the accompanying drawings.

10 My invention relates to an improved apparatus for the manufacture of stencils and has for its object the provision of a cheap and simple fitting or attachment which is advantageously applicable to type-writing machines, 15 for example whereby they are applicable for the production of stencil sheets or sheets of

perforated material.

According to my invention I wind or otherwise place fine twisted, stranded or plaited 20 wire packed closely upon the periphery of the roller or other support against which the paper or other sheet rests when it receives the impact of the type or punch, so that the said sheet is supported upon a large number of 25 small ridges formed by the convolutions of the said fine twisted, stranded or plaited wire.

When the apparatus is used for the manufacture of stencils the sheet is sharply struck by a metal or other hard type or a punch and 30 forced against the said convolutions and perforated by them with a series of minute perforations at the parts of the sheet upon which the face of the said type or punch bears, so that groups of such perforations in the form 35 of letters or characters may be readily formed as desired in the sheet which is thereafter ready for use as a stencil sheet. I prefer to employ for the said stencil sheets paper suitably prepared with wax, stearine, paraffine 40 varnish or otherwise rendered impermeable to the oily ink or to moisture which is employed upon them when they are used for stenciling. Instead of twisted or plaited wire I may employ fine wire of the kind used in 45 certain stringed musical instruments and obtained by winding one or more wires upon I

another wire which forms a core. The said wires may be of any suitable material and of any suitable cross section, but I prefer to employ wires of cast-steel or of such other ma- 50 terial as may be secured in place by brazing or soldering and tempered and hardened. The winding of adjacent lengths of wire may be varied if desired, so that the convolutions

thereof may not be parallel.

In the accompanying drawings Figure 1 is an elevation of a portion of a metal plate upon which is soldered a wire formed by twisting two wires A and B together, a portion only of the wire winding is shown. Fig. 2 is an ele- 60 vation of a similar plate upon which a winding consisting of a wire B coiled upon an untwisted wire A is secured. Fig. 3 is an elevation similar to Fig. 1, but with two twisted wires one right-handed and the other left- 65 handed wound thereon in parallel coils.

The wires A and B may be secured to each other and to the cylindrical or other support upon which they are carried, by brazing or soldering or by any other suitable means.

I wish it to be clearly understood that I do not limit my invention to the particular arrangements hereinbefore described which are given by way of example.

What I claim is—

1. A device for use in the manufacture of stencils, consisting of a support for the material of which the stencils are to be formed, faced with twisted wire, substantially as set forth for the purpose specified.

2. A device for use in the manufacture of stencils, consisting of a support for the material of which stencils are to be made, faced with wire coiled upon a wire core, substantially as set forth, for the purpose specified.

In witness whereof I have hereunto set my hand this 8th day of September, 1892.

EUG. DE ZUCCATO.

Witnesses:

GEO. HARRISON, WM. JNO. TERRANT.