

J. GOEBEL.
METHOD OF MANUFACTURING PERFORATED TEAR-OFF PAPER AND LIKE BLOCKS.
APPLICATION FILED FEB. 2, 1910.

1,025,620.

Patented May 7, 1912.

Fig. 2.

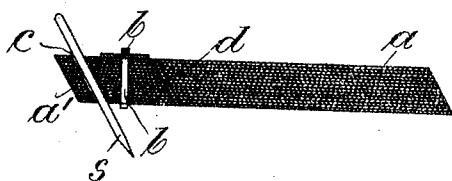


Fig. 3.

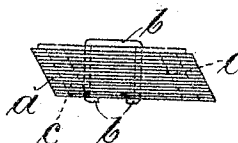


Fig. 1.

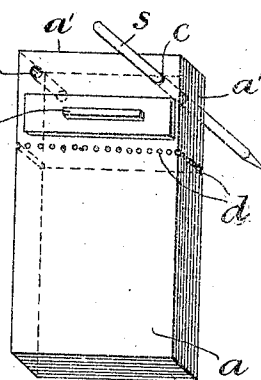
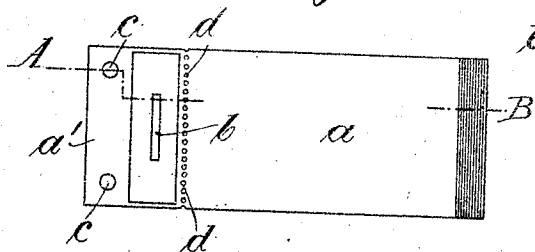


Fig. 4.

Witnesses:
Corinne Myers,
Thomas Donnellan.

Inventor:
Jean Goebel
by L. H. Schmitt,
Attorney.

UNITED STATES PATENT OFFICE.

JEAN GOEBEL, OF DARMSTADT, GERMANY.

METHOD OF MANUFACTURING PERFORATED TEAR-OFF PAPER AND LIKE BLOCKS.

1,025,620.

Specification of Letters Patent.

Patented May 7, 1912.

Application filed February 2, 1910. Serial No. 541,427.

To all whom it may concern:

Be it known that I, JEAN GOEBEL, a subject of the German Emperor, and resident of Darmstadt, in the Grand Duchy of Hesse, German Empire, have invented a certain new and useful Method of Manufacturing Perforated Tear-Off Paper and Like Blocks, of which the following is a specification.

This invention relates to an improved method of manufacturing perforated tear-off paper and like blocks and is also applicable for the manufacture of bundles of tickets of the perforated tear-off type.

Heretofore—after removing a number of the sheets—the rough edges of the stubs rendered the removal of the remaining sheets difficult and resulted in uneven tearing of the sheets. This is particularly the case where the perforations of the sheet to be torn off are covered somewhat by the rough edges of the stubs of the sheets already removed.

The object of the present invention is to provide an improved method of manufacturing perforated tear-off paper and like blocks, so that the perforations in the sheets may be arranged stepwise above one another or displaced relatively to one another either longitudinally or transversely of the sheets. In the latter case the removal of the tickets is also facilitated as one of the side edges of the topmost sheet projects laterally beyond the other sheets and thus affords ready means of lifting the topmost sheet.

According to the present invention I use sheets of paper or like material of a uniform size and perforate these sheets so as to divide the same into stubs and tear-off portions of like dimensions. Thereupon the sheets are provided with a hole or holes located in like position in the sheets. A tool or tools are then passed through the registering holes and the tool inclined at an angle to the plane of the sheets either longitudinally or transversely thereof or both longitudinally and transversely thereof, so as to displace the sheets accordingly. The sheets may then be bound in this position ready for use.

In order that my invention may be more clearly understood, reference is made to the accompanying drawings, in which a bundle of tickets manufactured by my improved process are illustrated, the drawings also illustrating the method of manufacture.

Figure 1 is a plan view, and Fig. 2 a sectional side view on the line A—B of Fig. 1. Fig. 3 is an end view of a slightly modified arrangement and method of manufacture. Fig. 4 is a plan view showing a block in which the sheets are displaced both longitudinally and transversely, and in which a tool is shown passing through one of the series of registering holes.

In the manufacture of the block shown in Figs. 1 and 2 the sheets or tickets are perforated at *d*, so as to divide the sheets into tear-off portions *a* and stubs *a'* of like dimensions. Holes *c c* are then punched through the stubs *a'* and the sheets then arranged one upon another upon a base-plate (not shown on the drawings) provided with holes corresponding to the holes *c c* and arranged at the desired angle to the plane of the sheets. Tools *s* are then passed through the holes *c* into the holes in the base plate and on passing through the latter the tools are caused to incline to the plane of the sheets, until the tools assume the position shown in either Figs. 2 or 4, whereupon the perforations *d* are caused to lie stepwise above one another. The stubs *a'* are then bound together by means of a binding device *b*.

It will be readily understood that when the holes *c* are circular, it is necessary to provide a plurality of such holes in each sheet in order to maintain the sheets in proper registration with each other when inserting the tools *s*, but if desired the hole *s* and the corresponding tool may be of prismatic shape or of other angular shape thus obviating the punching of a plurality of holes. In Figs. 1 and 2 the tool is shown as having been so inclined as to displace the sheets longitudinally.

In order to facilitate the removal of the sheets the block may, however, be made in the form shown in Fig. 3 by inclining the tool *s* at an angle transversely of the sheets, so that by this means one of the side edges of the topmost sheet is caused to project laterally beyond the corresponding side edges of the lower sheets. It will of course also be readily understood that the tool *s* may be inclined both longitudinally and transversely (as shown in Fig. 4) relatively to the sheets, so as to displace the sheets accordingly.

I claim:—

1. Method of manufacturing perforated

2
 5 tear-off paper and like blocks which consists
 in perforating sheets of equal dimensions to
 form like stubs and tear-off portions, mak-
 ing a hole in the same relative position in
 10 each sheet, registering said holes with one
 another by passing a tool therethrough, in-
 clining the tool at an angle to the plane of
 the sheets so as to cause the perforations
 between the stubs and tear-off portions to
 15 lie stepwise above one another, and there-
 after binding the stubs together while the
 sheets are so arranged.

2. Method of manufacturing perforated
 tear-off paper and like blocks which consists
 15 in perforating sheets of equal dimensions to
 form like stubs and tear-off portions, mak-
 ing a plurality of holes in the same rela-
 tive position in each sheet, registering each
 hole in each sheet with the corresponding
 20 one in the other sheets by passing tools
 through the holes, inclining the tools at an
 angle to the plane of the sheets so as to
 cause the perforations between the stubs
 and tear-off portions to lie stepwise above
 25 one another, and thereafter binding the
 stubs together while the sheets are so ar-
 ranged.

3. Method of manufacturing perforated
 tear-off paper and like blocks which consists
 30 in perforating sheets of equal dimensions
 to form like stubs and tear-off portions,
 making a hole in the same relative position
 in each sheet, registering said holes with one
 another by passing a tool therethrough, in-
 35 clining the tool at an angle to the plane of
 the sheets so as to displace the perforations
 between the stubs and tear-off portions rela-
 tively to one another transversely of the
 sheets, and thereafter binding the stubs to-
 40 gether while the sheets are so arranged.

4. Method of manufacturing perforated
 tear-off paper and like blocks which con-
 sists in perforating sheets of equal dimen-
 45 sions to form like stubs and tear-off por-
 tions, making a plurality of holes in the
 same relative position in each sheet, regis-

tering each hole in each sheet with the cor-
 responding one in the other sheets by pass-
 ing tools through the holes, inclining the
 tools at an angle to the plane of the sheets
 50 so as to displace the perforations between
 the stubs and tear-off portions relatively to
 one another transversely of the sheets, and
 thereafter binding the stubs together while
 the sheets are so arranged. 55

5. Method of manufacturing perforated
 tear-off paper and like blocks which consists
 in perforating sheets of equal dimensions
 to form like stubs and tear-off portions,
 making a hole in the same relative position
 60 in each sheet, registering said holes with
 one another by passing a tool therethrough,
 inclining the tool at an angle to the plane
 of the sheets so as to displace the perfora-
 tions between the stubs and tear-off portions
 65 relatively to one another both transversely
 and longitudinally of the sheets, and there-
 after binding the stubs together while the
 sheets are so arranged.

6. Method of manufacturing perforated
 tear-off paper and like blocks which con-
 sists in perforating sheets of equal dimen-
 sions to form like stubs and tear-off por-
 tions, making a plurality of holes in the
 same relative position in each sheet, regis-
 75 tering each hole in each sheet with the cor-
 responding one in the other sheets by pass-
 ing tools through the holes, inclining the
 tools at an angle to the plane of the sheets
 so as to displace the perforations between
 80 the stubs and tear-off portions relatively to
 one another both transversely and longi-
 tudinally of the sheets, and thereafter bind-
 ing the stubs together while the sheets are
 so arranged. 85

In witness whereof I have hereunto set
 my hand in the presence of two witnesses.

JEAN GOEBEL.

Witnesses:

JEAN GRUND,
 CARL GRUND.