

No. 707,541.

Patented Aug. 26, 1902.

A. BARUCH.

METHOD OF PRODUCING PRINTED MATTER.

(Application filed Dec. 18, 1901.)

(No Model.)

Fig. 1.

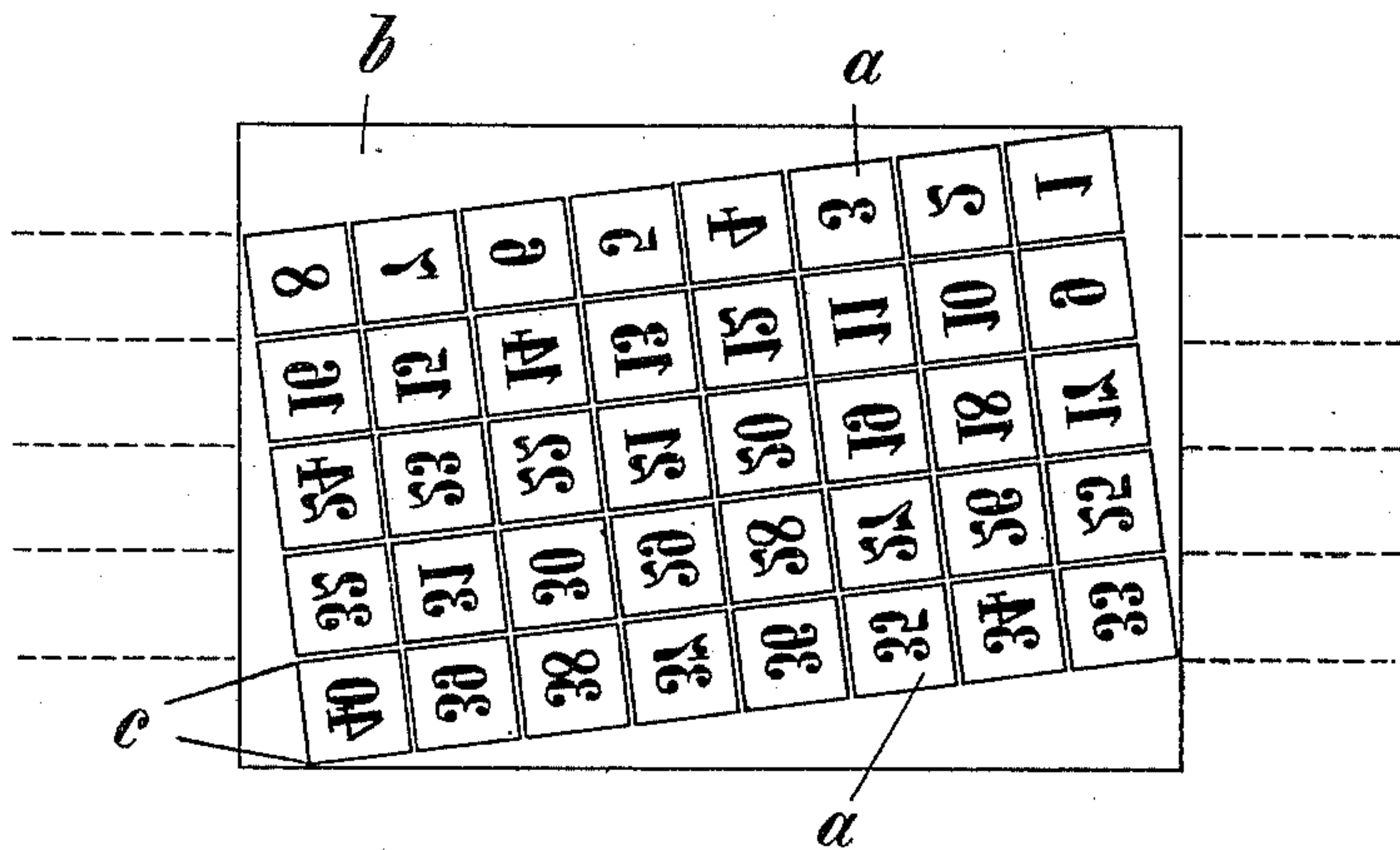
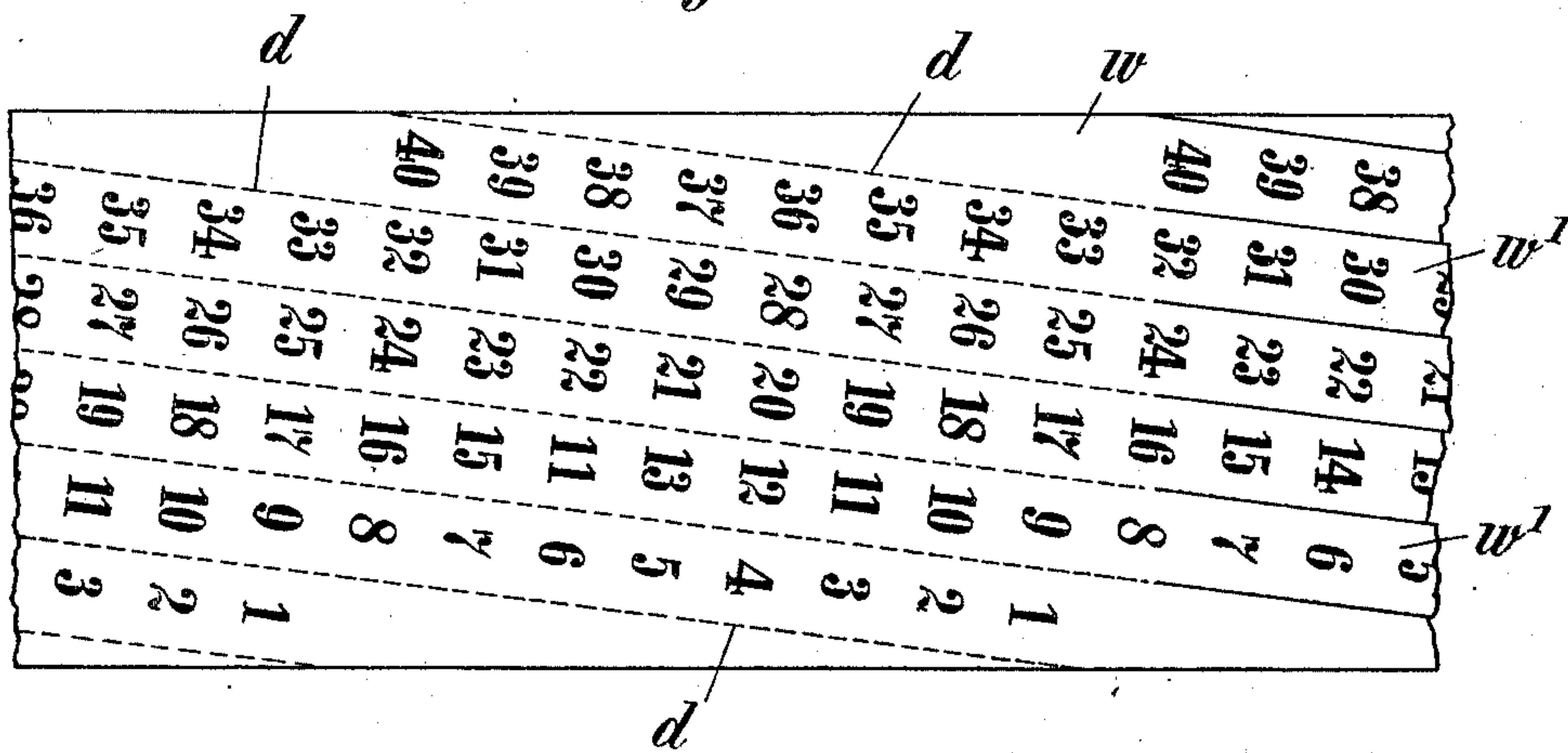


Fig. 2.



Witnessed:
Attest

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UNITED STATES PATENT OFFICE.

ALPHONS BARUCH, OF HAMBURG, GERMANY.

METHOD OF PRODUCING PRINTED MATTER.

SPECIFICATION forming part of Letters Patent No. 707,541, dated August 26, 1902.

Original application filed August 10, 1901, Serial No. 71,641. Divided and this application filed December 18, 1901. Serial No. 86,381. (No specimens.)

To all whom it may concern:

Be it known that I, ALPHONS BARUCH, a subject of the German Emperor, and a resident of Hamburg, in the German Empire, have invented a certain new and useful Improved Method of Producing Printed Matter, forming divisional portion of my pending application filed August 10, 1901, Serial No. 71,641, of which the following is a specification.

The present invention relates to printing, and has for its object an improved method according to which a length of printed matter exceeding the length of the printing-surface at command may yet be produced from such printing-surface, notwithstanding the limited length of the latter.

My invention consists in arranging the types in columns or rows at an angle to the longitudinal axis or to the direction of the movement of the printing-surface, so that the end of each oblique column or row of types registers with the beginning of the next oblique column in succession, and in taking repeated prints or impressions on an impression-surface of a web of paper, cloth, or the like in such a manner that the several prints or impressions follow immediately one another and the oblique rows of a subsequent impression form the continuation of the corresponding oblique rows of a preceding impression, the corresponding rows of a series of such subsequent or repeated prints forming, therefore, one continuous oblique row or column bearing numbers, letters, symbols, or words running in regular order or the particular sequence desired. In this manner a plurality of parallel continuous rows of symbols is produced which cross the web in an oblique direction, the length of each row being a multiple of the length of the printing-surface used. The said web is then finally cut or separated longitudinally between the continuous symbol-rows into a plurality of strips, each strip containing the symbols, &c., in the desired consecutive order.

In order that my invention may be more fully understood by one skilled in the particular art to which it appertains, I shall now proceed to describe the same in detail, refer-

ence being taken to the accompanying sheet of drawings, wherein—

Figure 1 is a diagrammatic view illustrating the manner in which the set of type is to be arranged, and Fig. 2 shows a portion of an imprinted web and illustrates the abutment or order of succession of the impressions on the said web.

Similar letters refer to similar parts throughout both views.

Presuming, for example, that it is required to produce strips bearing rows of numbers running in regular numerical order—say from “1” to “40”—which strips or rows of numbers respectively exceed the limited length of the printing-surface or set of type, the length of which may, for example, correspond to about the length of a row or series of eight type-numbers only, then the type-numbers *a* are so to be arranged in columns or rows of even length and at an angle to the axis of the printing-surface *b* that the end of each column or row *c* registers with the beginning of the next column or row in succession, as indicated by dotted lines in Fig. 1. From the thus-arranged printing-surface repeated impressions are made on a suitable web *w*, Fig. 2, in such a manner that the repetitions follow one another closely and the number-rows of the several repeated impressions supplement one another, so as to form continuous number-rows running in an oblique or diagonal direction over the breadth of the web, as this is obvious from Fig. 2 without any further detailed explanation. In the example shown five impressions are necessary to complete the first number-row of the first impression made, so as to contain the numbers “1” to “40” in regular numerical order. The continuous rows of numbers which contain the full amount of symbols—viz., the numbers “1” to “40”—have, therefore, about five times the length of the printing-surface proper. The impression surface or web thus imprinted is finally cut or separated between the continuous rows along or about along the dotted lines *d* into a plurality of narrow strips *w'*, each strip containing, as desired, the numbers “1” to “40” in the consecutive numerical order.

Having fully described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. The method of printing continuous strips, which consists in arranging the printing-surfaces in rows at such an angle to the length of the material to be printed upon, that the end or foot of each row will register with the top or beginning of the next adjacent row at the next succeeding impression, and taking successive impressions from the printing-surface to produce columns of printed matter longer than a row of printing-surfaces, substantially as described.

2. The method of printing symbols in continuous strips, which consists in arranging the printing-surfaces in parallel rows at such an angle to the length of the material to be printed upon, that the foot or bottom of each parallel row will register with the top of the next adjacent row when the material is moved lengthwise an amount equal to the length of the impression, and separating said material

between the continuous rows of symbols into strips, substantially as and for the purpose set forth.

3. The method of printing continuous strips, which consists in arranging the printing-surfaces in parallel rows at such an angle to the length of the material to be printed upon, that the foot or bottom of each parallel row will register with the top of the next adjacent row, simultaneously taking an impression from all the rows, moving the material lengthwise the distance of a printed row preparatory to taking the next impression and cutting the material into strips between the diagonal continuous rows of impressions thus made, substantially as and for the purpose set forth.

ALPHONS BARUCH.

Witnesses:

MAX LEMCKE,
OTTO W. HELLMRICH.