

Patent  
No. 1011006



Elizabeth the Second by the Grace of God of the United Kingdom of Great Britain and Northern Ireland and of Her other Realms and Territories Queen, Head of the Commonwealth, Defender of the Faith: To all to whom these presents shall come greeting:

WHEREAS Vladimir Faik Tamari, a Jordanian citizen, whose address is P.O.B. 43, Ramallah, Jordan.

(hereinafter referred to as the said applicant) hath prayed that a patent may be granted unto him for the sole use and advantage of an invention for Improvements in printing.

AND WHEREAS the said applicant (hereinafter together with his executors, administrators, and assigns, or any of them referred to as the patentee) hath declared that there is no lawful ground of objection to the grant of a patent unto him:

AND WHEREAS the complete specification has particularly described the invention:

AND WHEREAS We, being willing to encourage all inventions which may be for the public good, are graciously pleased to condescend to his request:

KNOW YE, THEREFORE, that We, of our especial grace, certain knowledge, and mere motion do by these presents, for Us, our heirs and successors, give and grant unto the said patentee our especial licence, full power, sole privilege, and authority, that the said patentee by himself, his agents, or licensees, and no others, may subject to the conditions and provisions prescribed by any statute or order for the time being in force at all times hereafter during the term of years herein mentioned, make, use, exercise and vend the said invention within our United Kingdom of Great Britain and Northern Ireland, and the Isle of Man, and that the said patentee shall have and enjoy the whole profit and advantage from time to time accruing by reason of the said invention during the term of sixteen years from the date hereunder written of these presents: AND to the end that the said patentee may have and enjoy the sole use and exercise and the full benefit of the said invention, We do by these presents for Us, our heirs and successors, strictly command all our subjects whatsoever within our United Kingdom of Great Britain and Northern Ireland, and the Isle of Man, that they do not at any time during the continuance of the said term either directly or indirectly make use of or put in practice the said invention, nor in anywise imitate the same, without the consent, licence or agreement of the said patentee in writing under his hand and seal, on pain of incurring such penalties as may be justly inflicted on such offenders for their contempt of this our Royal command, and of being answerable to the patentee according to law for his damages thereby occasioned:

PROVIDED ALWAYS that these letters patent shall be revocable on any of the grounds from time to time by law prescribed as grounds for revoking letters patent granted by Us, and the same may be revoked and made void accordingly:

PROVIDED ALSO that nothing herein contained shall prevent the granting of licences in such manner and for such considerations as they may by law be granted: AND lastly, We do by these presents for Us, our heirs and successors, grant unto the said patentee that these our letters patent shall be construed in the most beneficial sense for the advantage of the said patentee.

IN WITNESS whereof We have caused these our letters to be made patent  
as of the seventh day of August  
one thousand nine hundred and sixty-three and to be sealed



Comptroller-General of Patents,  
Designs, and Trade Marks

**PATENT SPECIFICATION**  
**DRAWINGS ATTACHED L011,006**

1.011.006



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Int. Cl.--B41 j//B41 m,n

## COMPLETE SPECIFICATION

I, VLADIMIR FAIR TAMARI, a Jordanian citizen, whose address is. P.O.B. 43, Rammalah, Jordan, do hereby declare the invention, for which I pray that a patent may be granted to me, and, the method, by which it is to be performed, to be particularly described in and by the following statement:-

This invention, relates to printing and, more especially to an improved set of type members which reduce the number of characters needed to print Arabic.

The term, "type member" as used herein is defined as meaning (a) a piece of type, such as is found in a typewriter or is, used in typesetting by hand (b) a mould, or master for making, such a piece of type, such as is found, in, the Monotype, Linotype or filmsetting equipment (c) a letter mounted on the back of a transfer sheet, such as is known by the commercial name of Letraset transfers (d) an opening in a stencil sheet, to guide the hand when printing or painting letters.

The words "Monotype", "Linotype" and "Letraset" are all Registered Trade Marks. To take the Roman alphabet as an example, at least 52 characters (26 capitals and 26 lower case) are needed, for normal printing and in practice even more characters are used to print various, punctuation and special 30 mathematical or scientific terms. In other alphabets, for instance, the Arabic alphabet of 28 letters the matter is complicated by various added curves and joining strokes according to whether the letter in question is at the beginning, in the middle or at the end, of a word. Thus, some type founts for, e.g. the Monotype method use over 300 characters to print Arabic.

The present invention provides a way of reducing, the number of characters. The invention consists in a set of type member for printing Arabic symbols, some of which symbols have a root portion, and an attached terminal portion, wherein said set is so formed, as to enable at least one type member to print the terminal portion of more than one symbol.

The term "to enable printing" is intended to cover the function of (a) the piece of type or transferable letter itself, which is a mirror image of the printed letter (b) of a matrix, shaped like the letter, used for forming re-castable types and, (c) of a stencil through which printing is effected.

It will be appreciated that Arabic is written, from right to left; therefore, by "root portion" I mean the terminal hook or loop which only occurs at the end of a word. As

printed, the "root portion" constitutes the right-hand part of a suitable symbol, while the terminal portion constitutes the left-hand part.

Preferably, the alphabet is an Arabic alphabet and in one preferred form of the invention. a set of type members is provided in which four of the type members are of such shapes as, to enable printing of the terminal portions of more than one symbol.

In this way the printing of Arabic would involve around 45 characters in the fount (including the 4 new type members) instead of the great number of characters currently used ranging from 68 to, 300 characters,, depending on the type face used.

It will of course be appreciated by a man skilled in the art that the actual printed alphabet should be to some extent simplified. By analogy, if an English alphabet were being printed according to, the invention a sans-serif face should be used.

The invention still further consists in:-

(a) a set of type members as described above in which at least one type member is so formed as to enable printing of an upwardly concave terminal curve for use with the Arabic letters dad, sad, sin, shin, lam.

(b) a set of type members as described above in which at least one type member is so formed as to enable printing of a terminal curve concave toward the right for use with the Arabic letters ghen, 'in, kha, gim, ha.

(c) a set of type members as described above in which at least one type member is so formed as to enable printing of a generally L-shaped termination for use with the Arabic letters gaf, fa, tha, and ba.

(d) a set of type members as described above in which at least one type member, is so formed as to enable printing of a generally capital-gamma shaped termination for use with the Arabic letter mim.

It is a preferred, feature to provide a set of type members as described above in which a type member which is so formed as to enable printing of the terminal portion of more than one; symbol is of such a thickness that it also provides a space between two consecutive words,

The invention will be further described with reference to the accompanying drawings, in which:-

Figure 1 shows diagrammatically the use of two type members for providing a tail or stem for certain letters, of the English alphabet. This figure does not demonstrate any part of the set of type members of the present invention. Figures 2 to 5 show four type members and their use with certain letters of the Arabic alphabet.

In Figure 1, it can be seen how an upper stem 1 transforms an a into a d or an n into an h, while a lower tail 2 transforms an a into a g, and i into a j and a v into a y.

Thus, the nine letters *a d g h i j n v y* can be formed from the six type members *a i n v* and strokes 1 and 2.

In Figure 2, it can be seen how a terminal portion constituted by an upwardly concave curve 3 can be added to the root portion of letters sin (4) shin (5) sad (6) dad (7) lam (8). In Figure 3, a terminal portion constituted by a curve 9 concave to the right is shown as added on to the root portion of letters in (10) ghain (11) ha (12) gim (13) and kha (14). In Figure 4, a terminal portion constituted by a generally L-shaped termination 15 is shown as added on to the root portion of letters ba (16) ta (17) tha. (18) fa (19) and gaf (20).

In Figure 5, a terminal portion constituted by a capital-gamma-shaped termination 21 is shown as added on to the root portion of the letter mim (22).

In each of these Figures, the characters are shown in rectangular boxes to, give an idea of the size of the piece of type or matrix. Space 23 is an important preferred feature of the invention, since the terminal portions 3, 9, 15 and 21 always occur at the ends of words, and therefore a blank space is needed before the beginning of the next word.

It is of course possible to have a separate space, as is well-known in the art.

The Arabic alphabet can exist in many type faces, in the same way as the Roman alphabet exists in, e.g. Italic, Sans-serif or Gothic type faces. This invention should be applied to a simplified face of the Arabic alphabet, i.e. one analogous to a Sans-serif face, or other faces slightly adapted to suit the invention.

Thus, in a suitable type face for use with the present invention there is a common root portion which in itself serves as both an initial and middle form of the letter. The terminal portion is added to this to form the terminal form of the letter

WHAT I CLAIM IS:-

1. A set of type members for printing Arabic symbols, some of which symbols, have a root portion and an attached terminal portion, wherein said set is so formed, as to enable at least one type member to print the terminal portion, of more than one symbol.

2. A set of type members as claimed in claim 1, in which four of the type members are of such shapes as to enable printing of the terminal portions of more than one symbol.

3. A set as claimed in claim 1 or 2 in which at least one type member is so formed as to enable printing of an upwardly concave terminal curve for use with the Arabic letters, dad, sad, sin, shin, lam.

4. A set as claimed in claim 1 or 2 in which at least one type member is so formed as, to enable printing of a terminal curve concave toward the right for use with, the Arabic letters ghen, 'in, kha, gim,, ha.

5. A set as claimed in claim 1 or 2, in which at least one type member is so formed as to enable printing of a generally L-shaped termination for use with, the Arabic letters gaf, fa, tha, ta, ba.

6. A set as claimed in claim 1 or 2 in which at least one type member is so formed as to enable printing of a generally capital gamma-shaped termination for use with the Arabic letter mim.

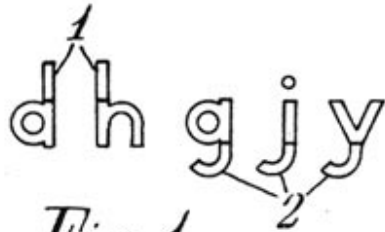
7. A set of type members as claimed in any one preceding claim in which a type member which is, so formed as to enable printing of the terminal portion of more than one symbol.

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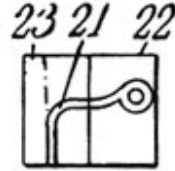
COMPLETE SPECIFICATION

1 SHEET

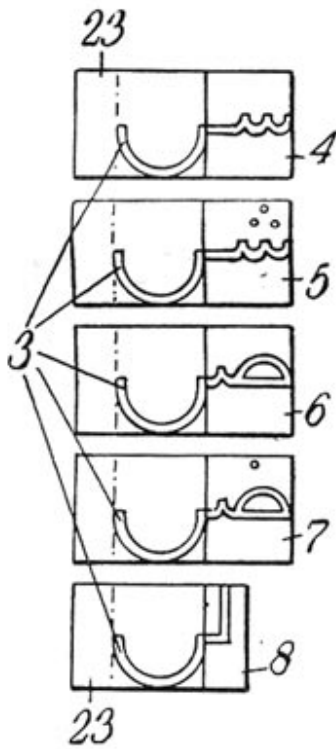
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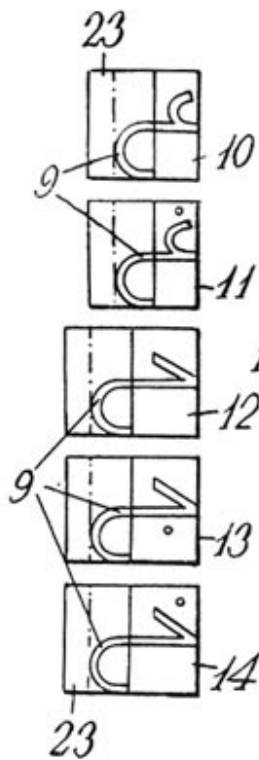
*Fig. 1*



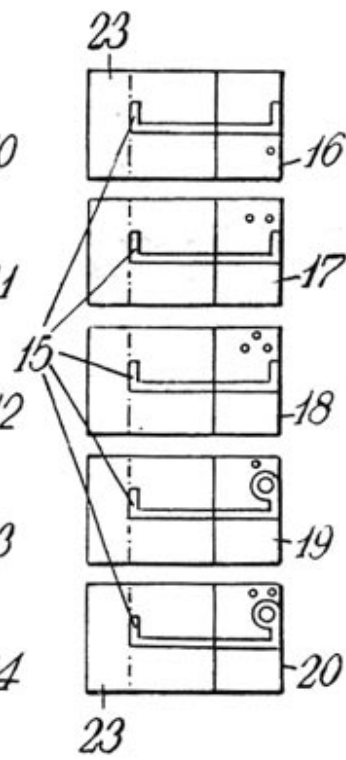
*Fig. 5*



*Fig. 2*



*Fig. 3*



*Fig. 4*

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