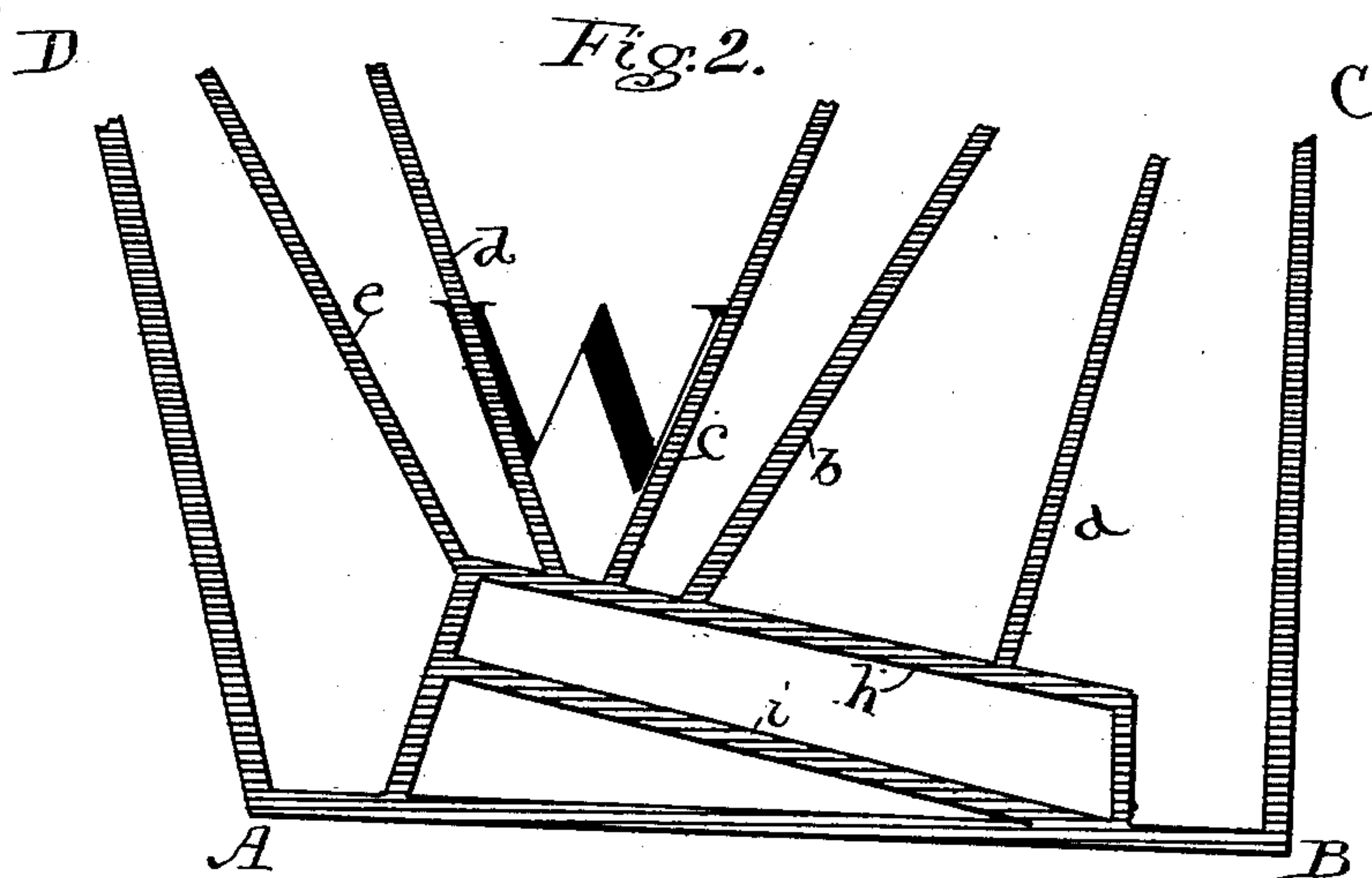
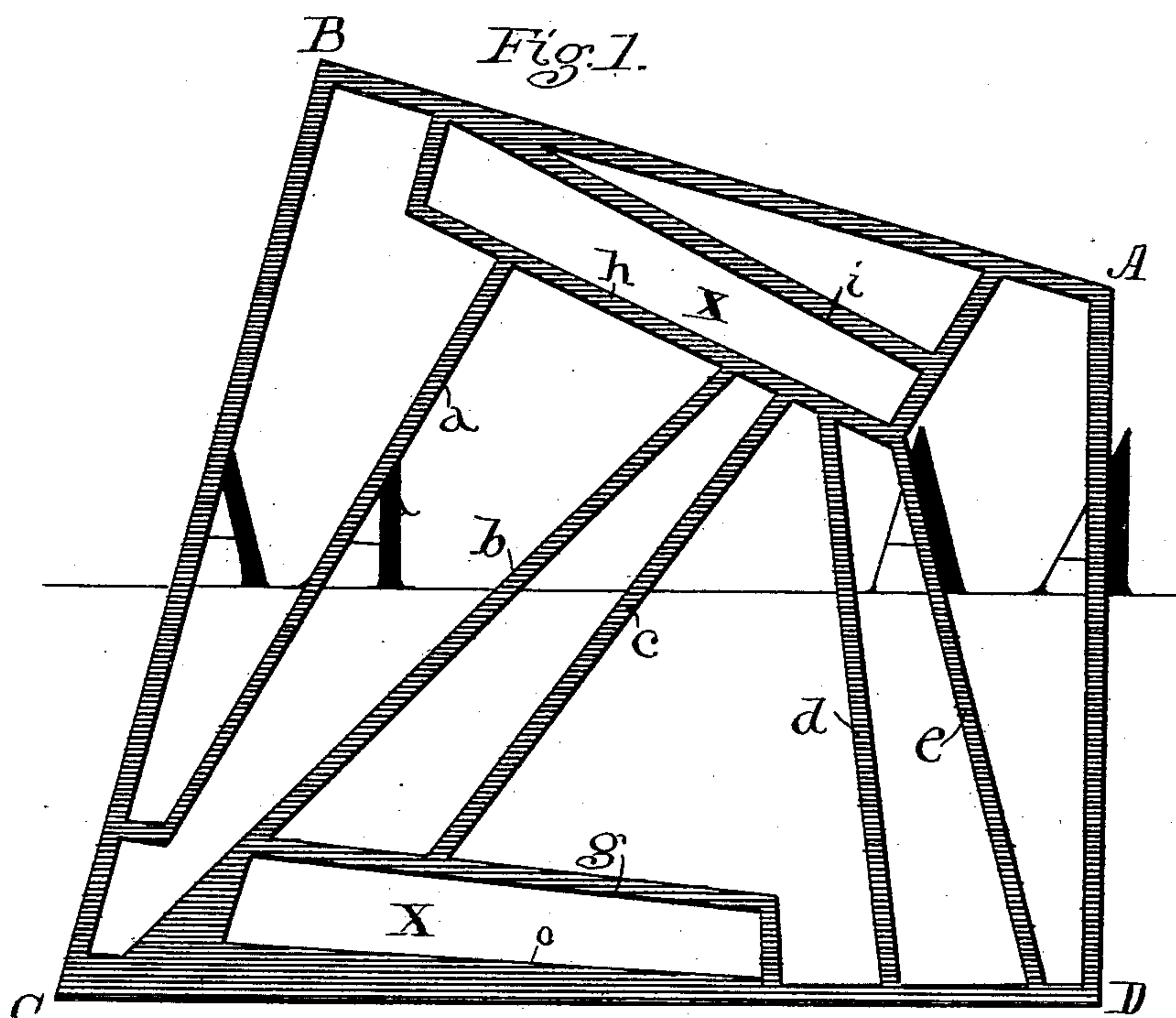


(No Model.)

J. SPRINGER.
LETTERING BLOCK.

No. 377,090.

Patented Jan. 31, 1888.



Witnesses:
Robert A. Davis.
John C. Jones

Inventor:
Job Springer
by S. M. Bates
his atty.

UNITED STATES PATENT OFFICE.

JOB SPRINGER, OF AUGUSTA, MAINE.

LETTERING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 377,090, dated January 31, 1888.

Application filed February 5, 1887. Serial No. 226,636. (No model.)

To all whom it may concern:

Be it known that I, JOB SPRINGER, a citizen of the United States, residing at Augusta, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Lettering-Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to lettering - blocks such as are used for marking letters and for drafting purposes; and it consists of a flat skeleton block having four sides, its outer edges making with each other angles which are most continually used in lettering and drafting, its interior portion being divided into straight or skeleton bars, which form, with the different sides, such angles as are used in the various forms of standard lettering, as well as many of the common angles used in mechanical drawing, such as thirty degrees, forty-five degrees, and sixty degrees.

My device is particularly applicable to the lettering of tablets, monuments, &c., where standard letters are employed, which letters are marked on stone preparatory to being cut with a chisel.

Hitherto the lettering-block which has been in most common use has been one having two square or rectangular corners and with one sloping side. This is limited in the number of uses to which it can be put, the chief disadvantage being that in order to make the forward and back slopes of such a letter as A the block must be reversed.

My invention is illustrated in the accompanying drawings, in which—

Figures 1 and 2 show my lettering block in different positions.

The outer sides, A B and B C, form with each other a right angle, as do the sides A D and D C, while the sides A B and A D, also B C and C D, form with each other angles of about one hundred and five degrees and seventy-five degrees, respectively. The block is divided up into skeleton bars or double straight edges A D, e, d, c, b, d, B C, &c., and the single straight edges i, h, g, and o, these last forming the sides of the slots or openings marked X X, and all the various straight edges forming angles with the several sides of the block. The arrangement

of these bars is as follows, viz: Regarding the side A B as a base, the bars are arranged in pairs, making an equal and opposing angle with the base A B. Thus the bars c and d would constitute a pair, each making an equal angle with the base, except that they slope in opposite directions. The bars b and e and a and A D would also be pairs. If, now, the block be turned over, using the side B C as a base, the edges o and i will form a pair, making equal and opposite angles with the base, as will the bars g and h.

The various pairs of straight edges which I have pointed out are to be used in forming the forward and back slope of straight or vertical letters, as in forming the W shown in Fig. 2, where the two bars c and d of the pair are used for forming the slopes of the W without changing the position of the block. If, now, the block be turned over, so as to use the side C D as a base, as in Fig. 1, each pair of bars a and A D, b and e, and e and d, which formed equal and opposing angles with the sides A B and B C, these sides being at right angles to each other, will now form unequal angles with the base C D—that is, each bar will make an angle fifteen degrees greater than before, reckoned from the left to the right. Thus the bars A B and a, which, with the base A B, were used to form an ordinary Roman A, will now be used to form an inclined or italic A, as in Fig. 1. In like manner the other pairs, e and b and c and d, will make, with the base C D being used, the inclined letters of which they made the upright letters with base A B. If the side A D be used as a base, the pairs o i and g h will be inclined fifteen degrees to the right, as before pointed out.

It will thus be seen that when upright letters are to be made the sides A B or B C must be used, and when inclined letters two sides, C D and A D. An opposite inclination may be obtained by using the same bases but inverting the block.

The various pairs of bars are to be used according as narrow or wide letters are to be made.

Some of the common angles used in lettering and drafting can be formed a number of times, using different edges, and varying from two to ten. For instance, the angle of thirty degrees may be formed four times, forty-five degrees

four times, and sixty degrees six times, in each direction. It will be observed that whichever side is used as a base a right angle may be drawn by the use of one of the adjacent sides, so that the block is always in position to draw a right angle.

I have indicated only a few of the many angles which my block is capable of making and the many uses to which it may be applied. Some of the interior bars may be left out and still make an effective device for lettering or drafting.

It will be seen that in my lettering-block the body of the block is cut away to a skeleton, thereby exposing to view the surface to be lettered.

I claim—

1. A lettering-block having straight sides and having its interior divided into straight

bars which incline toward each other and are arranged in pairs, as *c* and *d*, *b* and *e*, the two bars which constitute a pair making equal and opposite angles with one of the sides A B of the block, substantially as shown.

2. A lettering-block having the form of a quadrilateral two opposite angles of which are right angles, the remaining two being one greater and one less than a right angle, and having its interior divided into bars or straight edges in pairs, as *c* and *d*, *b* and *e*, the two bars of each pair forming equal and opposite angles with one of the sides, as A B, of the block.

In testimony whereof I affix my signature in presence of two witnesses.

JOB SPRINGER.

Witnesses:

J. S. JOHNSON,
J. W. NEAL.