(No Model.) 2 Sheets—Sheet 1.

# H. A. BOWMAN.

## METHOD OF MAKING FLAGS.

No. 469,395. Patented Feb. 23, 1892.

Fig. 1.

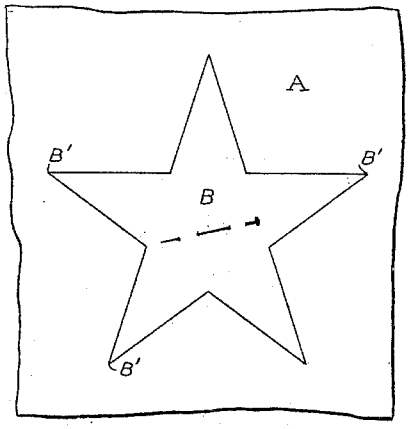



Fig. 2.

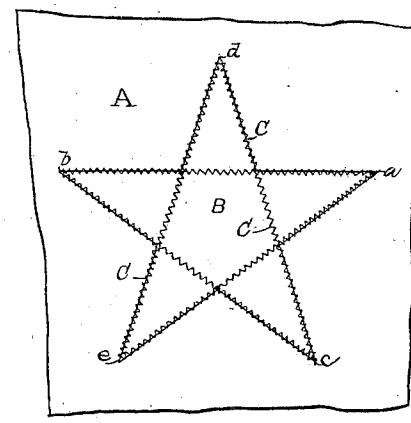



Fig. 3a.

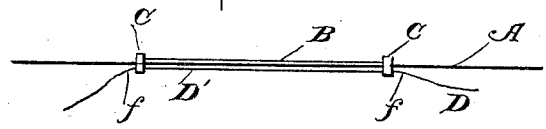



Fig. 3.

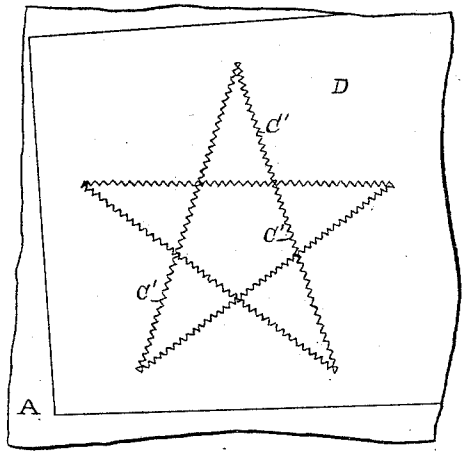
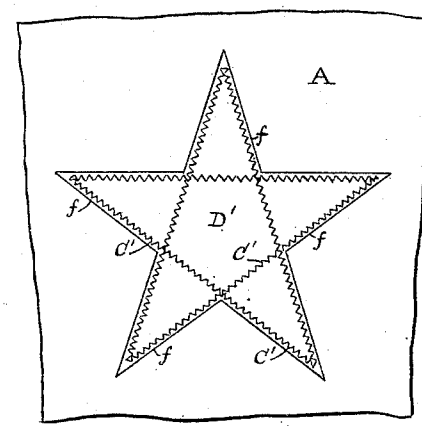



Fig. 4.




Witnesses;

Annie L. Gregan

David R. Brady

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(No Model.) 2 Sheets—Sheet 2.

# H. A. BOWMAN.

## METHOD OF MAKING FLAGS.

No. 469,395. Patented Feb. 23, 1892.

Fig. 5.

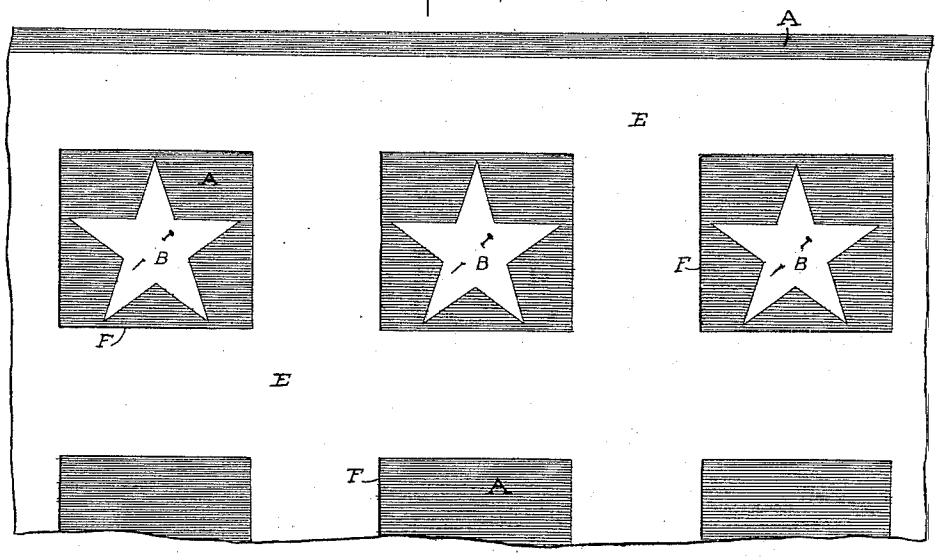
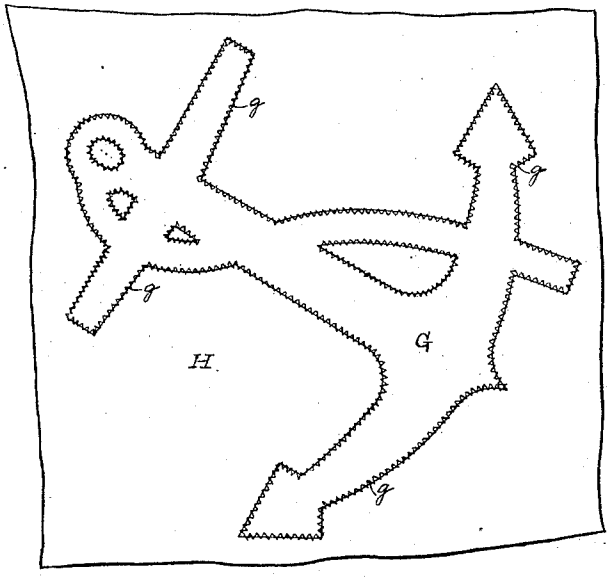



Fig. 6.




Witnesses;

Annie L. Grogan

David R. Brady

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Henry A. Bowman,

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# UNITED STATES PATENT OFFICE.

HENRY A. BOWMAN, OF WORCESTER, MASSACHUSETTS.

## METHOD OF MAKING FLAGS.

SPECIFICATION forming part of Letters Patent No. 469,395, dated February 23, 1892.

Application filed August 10, 1889. Serial No. 320,429. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY A. BOWMAN, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in the Method of Making Flags; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of my present invention is to afford a practical and efficient mode of affixing the emblems or stars upon the field fabric of flags, a mode whereby those affixed upon opposite sides of the field are caused to accurately correspond in their respective relations without requiring the exercise of especial care and attention by the operator; also, to provide a mode of affixing stars adapted for all sizes of flags, large as well as small sizes, and capable of being worked on fully-made up fields—a mode of construction that can be practiced with economic facility and by which the time, labor, and expense of manufacture are greatly reduced and a more desirable flag produced. These objects I attain by the mode of making flags hereinafter fully described and illustrated.

The drawings show only a portion of the field of a flag and a single star; but it will be understood that the same principle is applicable to the entire series throughout the whole of any flag.

Figure 1 represents a star as located and temporarily fastened upon the face of the flag. Fig. 2 represents the star upon the face of the flag as stitched through, corresponding to the lines of the front star. Fig. 3 represents the blank star formed by the lines of stitching shown in Fig. 2 upon the back of the ground. Fig. 3ª represents a sectional diagram of the field and star fabrics as stitched together. Fig. 4 represents the blank as trimmed to form, or after the surplus portions of the blank have been cut away to the lines of stitching. Fig. 5 represents a portion of a pattern which can be employed to facilitate the preliminary location of the face stars upon the flag; and Fig. 6 represents the application of my invention to other than star-formed emblems affixed to opposite sides of the flag by the same mode, as hereinafter explained.

To enable those skilled in the art to which my invention belongs to make and use the same, I will now describe the invention more in detail.

In the drawings, the part marked A represents the ground or field of a flag, upon which the stars are to be affixed or secured, with duplicate forms upon the two opposite sides of the field, and to accomplish this with accuracy and dispatch in a practically economical manner, in accordance with my present invention, I proceed as follows: The field of the flag or ground A being first made up and the stars B for the face of the flag cut out (by means of suitable dies or otherwise) to the exact proper size and shape, said field is spread upon any floor, table, or flat surface, and the star or series of formed stars B are respectively located in their proper positions upon the face of the flag or field A, and there temporarily fastened by a pin, one or more, passed through the fabrics. (See Fig. 1.) The field A is then turned over, and upon the back thereof is temporarily secured, by pins or basting, an unformed blank or blanks of the same material as that from which the stars B are cut, and of sufficient general dimension to cover the area corresponding to that occupied by the stars B upon the face side of the field.

In small flags the blank D is best made to cover the entire field; but for flags of large size it may be more economical to make the blanks D to cover one or more stars, accordingly as the merchantable sizes of cloths can be cut to the best advantage.

After the blank D is in place, the field is turned face upward and the stars B are then stitched to the field A, the stitching C passing through the fabric of the field and blank (see Fig. 3ª) and running on the edge lines of the star B. (See Fig. 2.) The stitching is preferably commenced at *a*, then run direct to *b*, thence to *c*, thence to *d*, thence to *e*, and thence to the place of beginning at *a*, crossing over the base of the star-points from angle to angle or the direct lines followed. The stitches are set in zigzag over the raw-cut edge of the star B, laying the same closely to the field fabric, and the outline shape is by the stitching duplicated, as shown at C′ on the blank D. (See Fig. 3.) After the stars have been thus stitched on, the surplus cloth of the blank D

is trimmed off at *f*, the line of cut being close to the line of stitching, thereby leaving stars D′ of proper size and form on the back of the field. (See Fig. 4.) Hence by this mode of operation the stars on both sides of the flag are made acurately opposite to each other. The zigzag stitching prevents the raw-cut edges from wearing off, while the stars lie flat and smooth upon the field fabric and do not present thick bulky seams nor give to the flag a stiffness such as comes from pasting the stars. The crossing of the lines of stitching fastens the central part of each star and keeps it from puffing out, as is the case when the stars are stitched on only at the outer edges of the star, according to the common practice before my invention.

To aid in the operation and secure exactness and uniformity in arrangement of the stars B for regular-sized flags, I have designed the form or pattern-sheet E, which may be of paper or other suitable material, with openings F, cut or formed in the same, said openings being best a little larger than the stars B. This pattern E being placed over the field A, the operator can quickly arrange the stars B therein and pin them onto the face of the field A, after which the pattern-sheet E is removed and the stars stitched on, as before explained. The face stars B can be located by measurement, or by other form of guide, if preferred.

It will be seen that the above-described mode of affixing the stars upon flags is one that saves a great deal of time and trouble and is a great saving in the cost of making the flags, while precision of the relative positions of the stars B is obtained and the same relative positions of the stars D′ is incurred.

My invention is alike applicable to the manufacture in similar manner, as above specified, to flags bearing emblems of other than star-shaped design—as, for instance, such as shown in Fig. 6—the design being in form of an anchor G, which is affixed to the flag or field fabric H by the outline of overseam-stitching *g* along its raw-cut edges, and it will be understood that the reverse anchor upon the back is produced by an unformed blank temporarily fastened to the field, stitched through, and then trimmed to the line of stitching, in the same manner as that described for the stars D′ and with the same general advantages in economy of production.

I claim as my invention herein to be secured by Letters Patent—

1. The method of making flags herein described, consisting in affixing and accurately duplicating the emblems or stars on opposite sides of the field fabric by stitching through the field and an underlying blank fabric from the outlines of the superposed accurately-formed star or emblem properly located on the face of the field and subsequently trimming the blank to the outline indicated by such stitching, whereby said stars for both face and back are given similarity of configuration and a smooth flat-laid attachment without unduly stiffening or encumbering the flag.

2. The method of making flags as herein described, which consists in locating and temporarily fastening accurately-formed stars or emblems upon the face of the field fabric, then temporarily fastening an unformed fabric or blank upon the back of the field fabric covering the positions and area of the face stars, stitching through the several plies on the outlines of the accurately-formed star by overseaming stitch embracing the raw-cut edges thereof, and then trimming away the outlying portions of the unformed blank fabric to conform to the stitched outlines of the face stars, substantially as set forth.

3. A flag having the emblems or stars with raw-cut edges affixed thereon in duplicates upon opposite sides of the field or ground fabric and secured by overseam-stitching that embraces the raw-cut edges of the face stars by zigzag stitches and is carried through the fabrics of the field and back stars, and said back stars having their edges trimmed adjacent to but outside the line of stitching, in the manner set forth.

HENRY A. BOWMAN.

Witnesses:
THOS. H. DODGE,
ANNIE L. GROGAN.