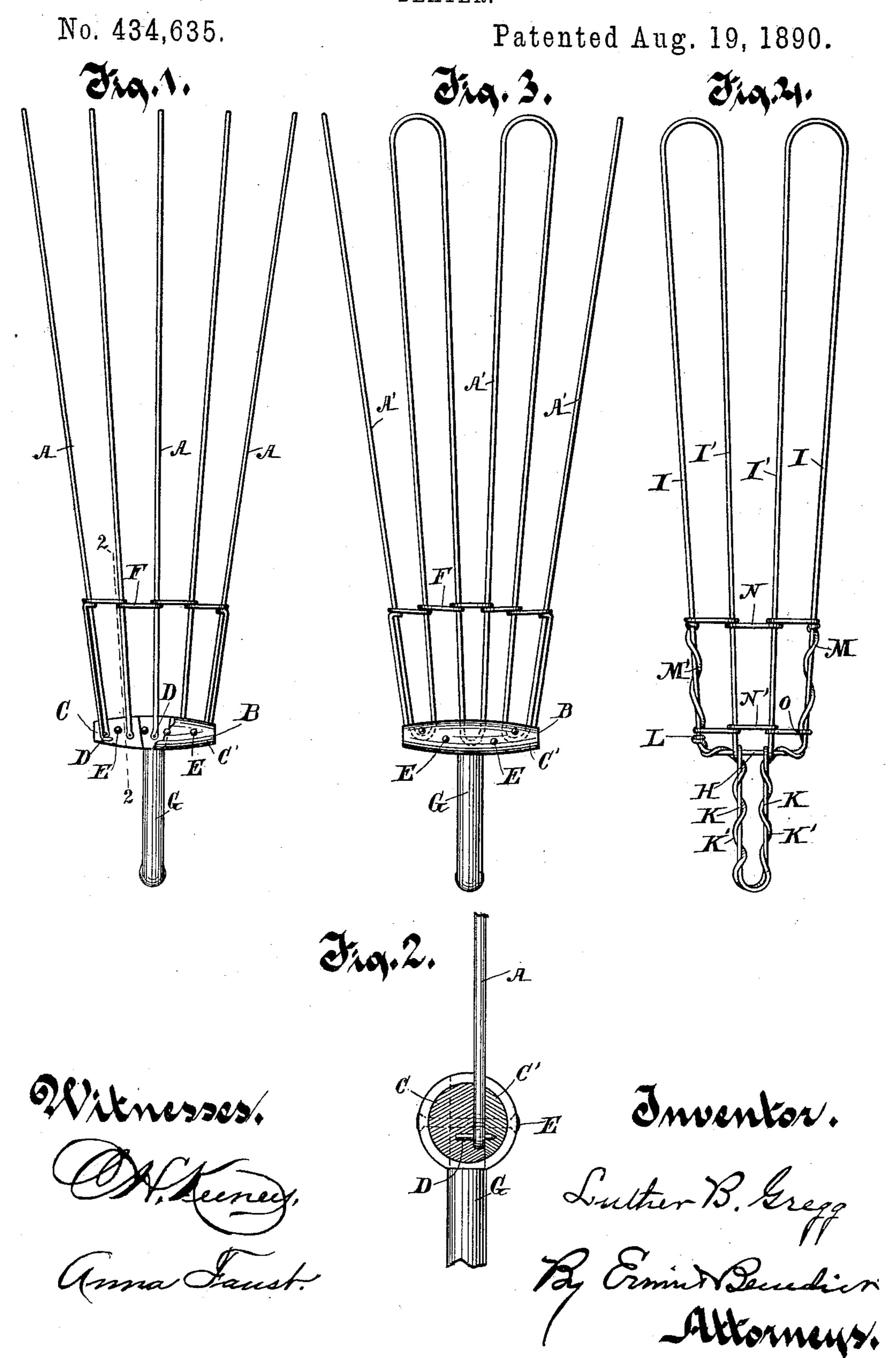
L. B. GREGG.
BEATER.



United States Patent Office.

LUTHER B. GREGG, OF WAUWATOSA, ASSIGNOR OF TWO-THIRDS TO GEORGE H. WOLCOTT AND MATTHEW BAUER, OF MILWAUKEE, WISCONSIN.

BEATER.

SPECIFICATION forming part of Letters Patent No. 434,635, dated August 19, 1890.

Application filed December 21, 1889. Serial No. 334,556. (No model.)

To all whom it may concern:

Be it known that I, LUTHER B. GREGG, of Wauwatosa, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Beaters; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to a device which is adapted for beating dust from clothing or car-

pets or for any similar use.

In the drawings, Figure 1 is a view of my complete device, parts being broken away to show interior construction. Fig. 2 is a longitudinal section of a part of the device, taken on line 2 2 of Fig. 1. Figs. 3 and 4 each show a modified form of my improved device.

My device consists of a series of flexible fingers or whips all arranged in a common plane and secured rigidly together at one end

in a common handle.

In the device shown in Fig. 1 the fingers A A are severally formed of a piece of flexible steel wire. These several fingers are each secured at one end flxedly in the cross-head B. For this purpose the cross-head is preferably 30 made in two parts C and C'. Short pins D D are inserted in the part C at equal distances apart, and the fingers A A are severally affixed to a pin D, the pin being received in an aperture therefor in the end of the finger or 35 wire. These wires or fingers are let into grooves therefor in the part C, and the part C' is then placed on the part C over the ends of the fingers and is secured to the part C by the rivets E E or other equivalent means. A 40 brace or stay rod F is formed of a piece of

wire, which is bent closely around the several fingers A A at a distance from the cross-head B, whereby the fingers are held at equal distances apart, and the ends of the stay-rod are preferably carried rearwardly to the cross-head being let into the part C and bent around

head, being let into the part C and bent around the ends of the outer fingers A A, whereby the stay-rod is secured permanently in place. A handle G is inserted and secured firmly in the

50 cross-head B.

In the modified form shown in Fig. 3 the fingers are constructed of a single piece of wire A', recurved at the ends to form the several fingers of the beater, all being located in the same plane, as heretofore described.

In the modified form of beater shown in Fig. 4 the entire device is formed of a single piece of wire. This form of device may be constructed in different ways so far as the process of construction is concerned, but may 60 be conveniently made by taking a piece of wire of the proper length to form the entire device and, using about the center of the wire for the cross-bar H, bending the two ends upwardly, forming fingers II, and then inwardly 65 and downwardly, forming the fingers I' I', carrying them downward around the cross-bar H and carrying them beyond the cross-bar, forming the strands K K of the handle, then crossing them at the outer end of the han- 70 dle and carrying them spirally, forming the strands K' K' about the strands K K, and continuing them up around the cross-bar H, ending one of the strands in a curve around a finger I at L and carrying the other strand 75 up around the other finger I, forming the strand M, and crossing and around each of the fingers forming the brace N, then carrying it around the other outer finger, forming the strand M', and thence around and cross- 80 ing the fingers, forming the brace N', ending with a turn around the outer strand I at O.

With a small wire a beater containing four fingers may be constructed that will be sufficiently rigid at the cross-head and in the han-85 dle for ordinary purposes, and with a larger and stiffer wire a beater may be constructed in this manner that can be used for heavier work.

What I claim as new, and desire to secure 90 by Letters Patent, is—

1. The combination, in a beater, of a series of flexible fingers arranged in a common plane, with a cross-head to which the fingers are rigidly secured at one end, and a stay-rod segred to the fingers at a distance from the cross-head, whereby the fingers are secured in position, substantially as described.

2. In a beater having several flexible fingers arranged in a common plane, a cross-head 100 in two parts, to which the fingers are secured, and a handle inserted in the cross-head, substantially as described.

3. A beater formed of a single piece of wire, in which beater are several fingers arranged in the same plane, a cross-head, and a brace whereby the fingers are held rigidly in position at one end, and a handle affixed to the

cross-head, substantially as described.

In testimony whereof I affix my signature in 10 presence of two witnesses.

LUTHER B. GREGG.

Witnesses:
C. T. BENEDICT,
ANNA FAUST.