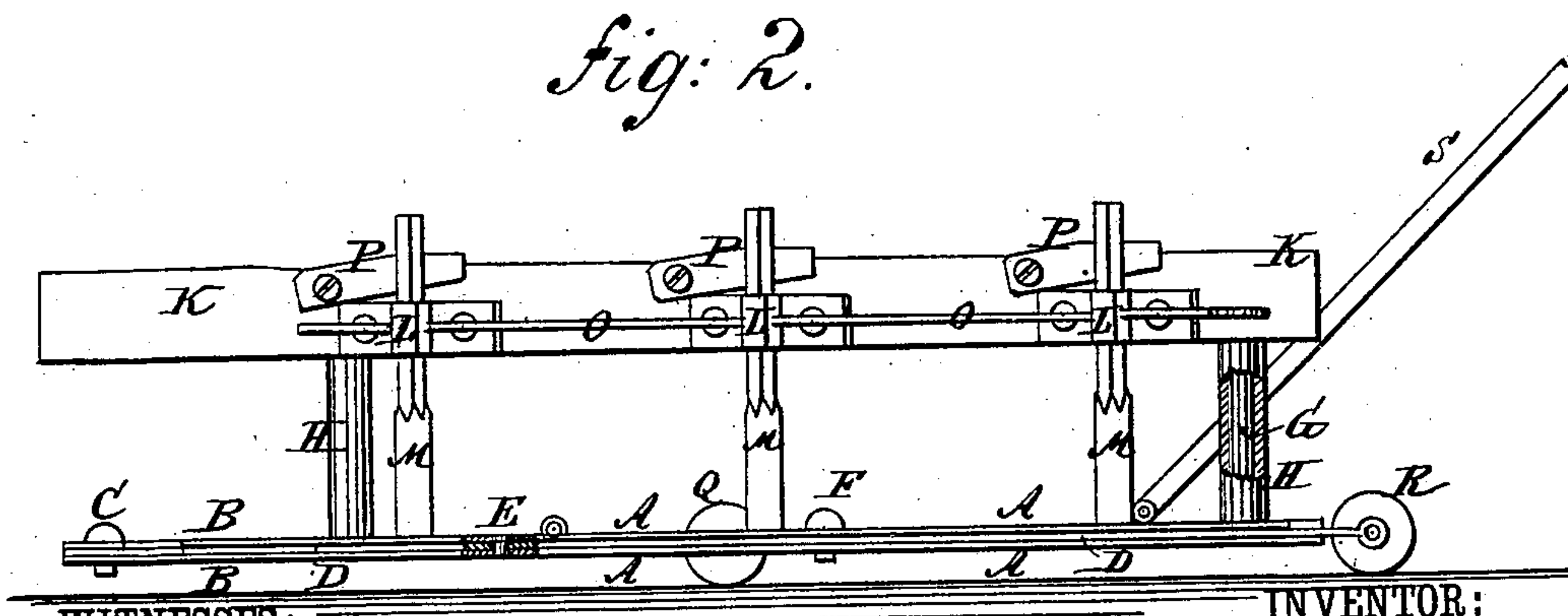
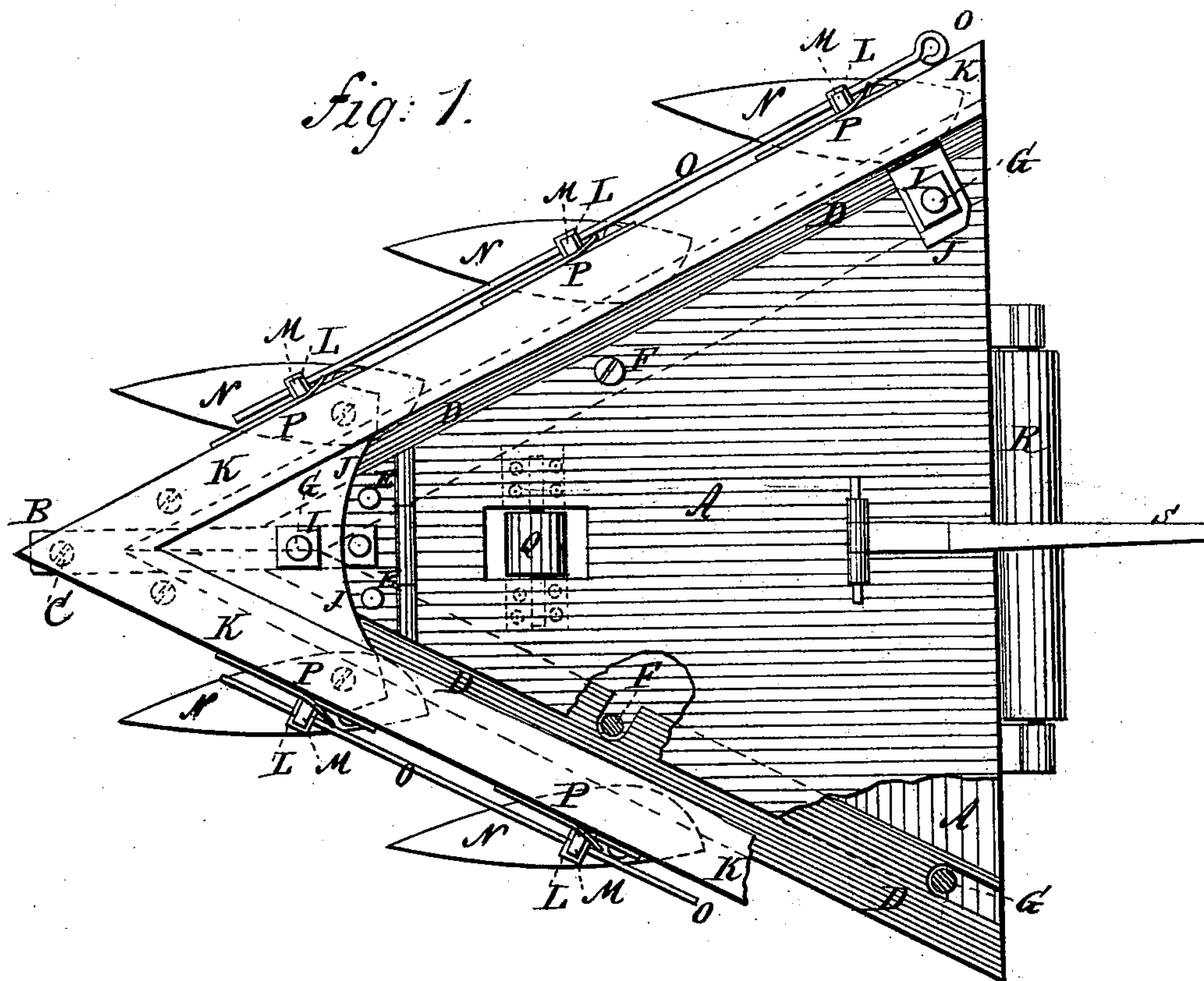


(Model.)

L. HOMES.
Grass Cutter.

No. 236,590.

Patented Jan. 11, 1881.



WITNESSES:

A. Schehl.
C. Sedgwick

INVENTOR:

L. Homes
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UNITED STATES PATENT OFFICE.

LUTHER HOMES, OF NEW ORLEANS, LOUISIANA.

GRASS-CUTTER.

SPECIFICATION forming part of Letters Patent No. 236,590, dated January 11, 1881.

Application filed September 21, 1880. (Model.)

To all whom it may concern:

Be it known that I, LUTHER HOMES, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful
5 Improvement in Grass-Cutters, of which the following is a specification.

Figure 1 is a plan view of the improvement, parts being broken away. Fig. 2 is a side elevation, parts being broken away.

10 Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish grass-cutters so constructed as to cut the grass without any vibration or rotation of the knives
15 as the machine is drawn forward, and which will allow the knives to be readily detached and sharpened.

In the accompanying drawings, A are two plates, made of metal or other suitable material, and in the form of isosceles triangles.
20 To the forward angles of the plates A are riveted, welded, bolted, or otherwise attached the rear ends of two bars, B, the forward ends of which are fastened to each other by a bolt or
25 screw, C. The forward part of the upper plate A is cut off, and the two pieces thus formed are hinged together, so that the forward part of the said upper plate A can be turned back to allow the long knives D to be detached.
30 The long knives D are inserted between the side edges of the plates A, and have their forward ends beveled, as indicated in dotted lines in Fig. 1, so that the said forward ends will fit against each other closely.

35 To the hinged forward part of the upper plate A are attached two pins, E, which, when the said part is lowered, pass through holes in the forward parts of the knives D, and enter holes in the lower plate A, so as to fasten the
40 forward parts of the said knives D in place. The middle parts of the knives D are secured in place by screws F, which pass through holes in the upper plate A, through holes or slots in the knives D, and screw into holes in the lower
45 plate A. I prefer to form slots in the knives D, leading in from their rear edges, so that the screws F will only require to be loosened to allow the knives D to be removed. The rear ends of the knives D are secured in place by
50 the posts G, which pass through holes in the upper plate A, through slots in the rear ends

of the knives D, and are attached to the lower plate A. A third post, G, is rigidly attached to the hinged forward part of the upper plate A. The three posts G have tubular washers
55 H placed upon them, and screw-threads cut upon their upper ends to receive the nuts I. The upper parts of the posts G pass through lugs or plates J, attached to the bars or beams K, which lugs or plates rest upon the upper
60 ends of the tubular washers H, and are secured in place by the nuts I, screwed upon the upper ends of the said posts G. The forward ends of the bars or beams K are beveled upon their inner sides and are attached to each other. 65

To the outer side of each of the bars or beams K is attached a number of keepers, L, through which pass the upper ends of a number of standards, M. To the lower ends of the standards M are attached knives N. The upper
70 ends of the standards M and the cavities of the keepers L are made square or rectangular, so that the said standards cannot turn in the said keepers. The standards M are secured in place in the keepers L by rods O, passed
75 through the said standards and keepers parallel with the bars or beams K. The cavities of the keepers L are made a little deeper than the width of the standards M, so that the said standards will have a slight rocking movement
80 upon the rods O. The upper ends of the standards M are held outward, holding their lower ends inward by springs P, attached at one end to the bars or beams K in such positions that their free ends will rest against the inner sides
85 of the upper ends of the said standards M. The knives N are tapered to a point at their forward ends, and the inner corners of their rear ends are rounded off, as shown in Fig. 1. The long knives D are sharpened upon their
90 outer edges. The knives N are sharpened upon their inner edges and upon their rounded rear ends.

With this construction, as the machine moves forward the grass passes in between and is
95 cut by the knives D N. Should a stub or other hard substance that cannot be cut pass in between the knives N D, the springs P allow the knives N to move outward and pass the said substance to prevent the said knives N from
100 being broken.

The machine is supported by and moves for-

ward upon the rollers Q R. The roller Q is placed in a cross-slot in the forward parts of the two plates A, and its journals revolve in bearings in the lower plate A. The roller R
5 is placed at the rear ends of the plates A, and its journals revolve in bearings attached to the rear end of the lower plate A. The rollers Q R roll upon the ground, and are made of such a size as to support the knives D N at
10 the desired distance above the ground.

To the middle rear part of the upper plate A is hinged the end of a bar, S, which serves as a handle in guiding the machine.

The machine may be propelled by hand-
15 power, or may be drawn by horses or other desired power.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a grass-cutter, the combination of the 20 two triangular plates A, having arms B, and having a hinge in the forward part of the upper plate, the screws C F, the posts G, having tubular washers H and nuts I, and the beams K, having lugs or plates J, to receive the posts 25 G, substantially as herein shown and described, to form a frame-work to receive the operating parts of the cutter, as set forth.

2. In a grass-cutter, the combination, with the beams K, attached to the posts G, and the 30 standards M, that carry the knives N, of the springs P, substantially as herein shown and described, whereby the knives N are allowed to yield to pass an obstruction, as set forth.

LUTHER HOMES.

Witnesses:

THOMAS FLANNERY,
GEO. F. FLANNERY.