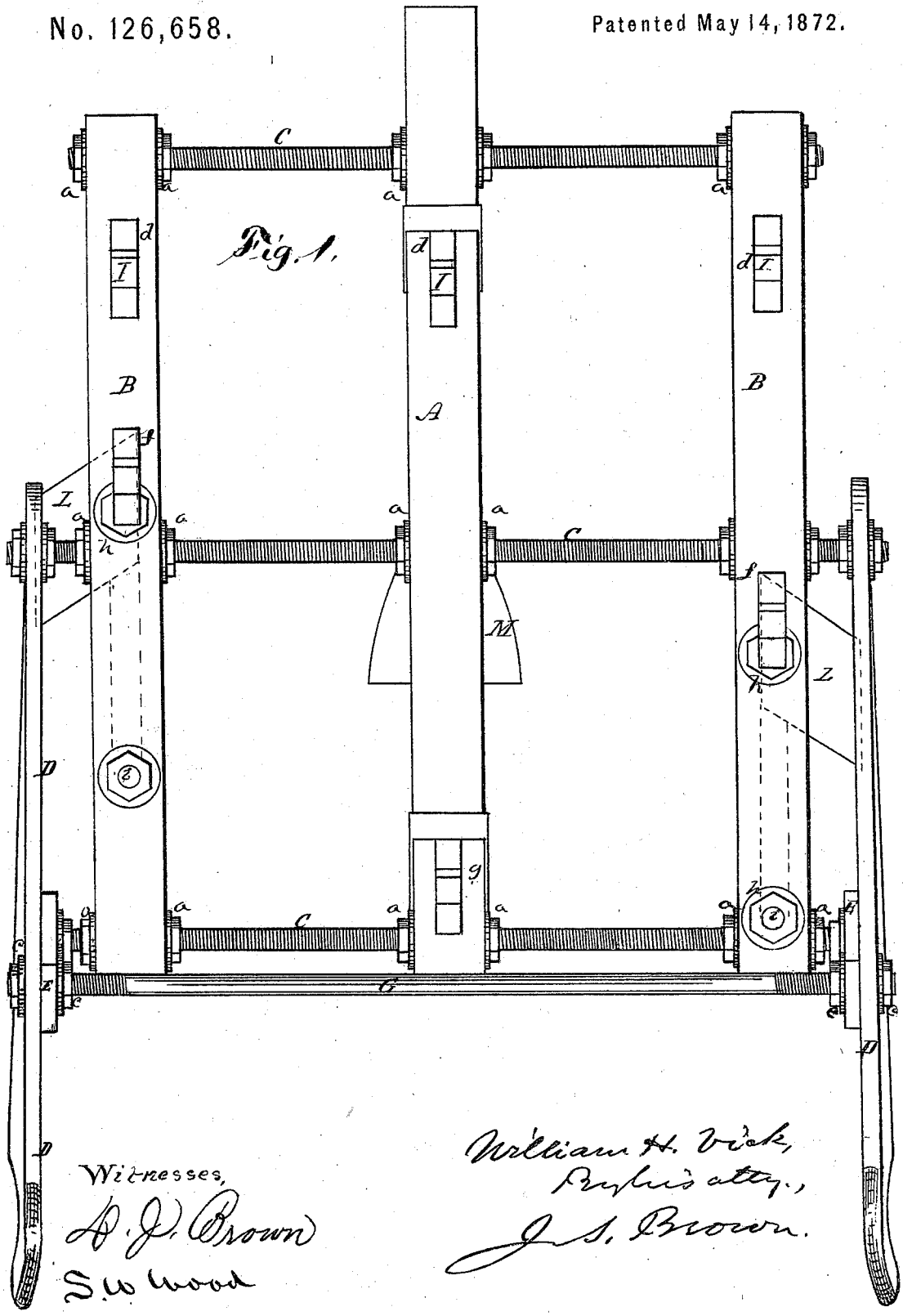
4 Sheets--Sheet 1.

WILLIAM H. VICK.

Improvement in Cultivators.

No. 126,658. Patented May 14, 1872.



Witnesses,
A. J. Brown
S. W. Wood

William H. Vick,
by his atty.,
J. S. Brown.

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WILLIAM H. VICK.
Improvement in Cultivators.

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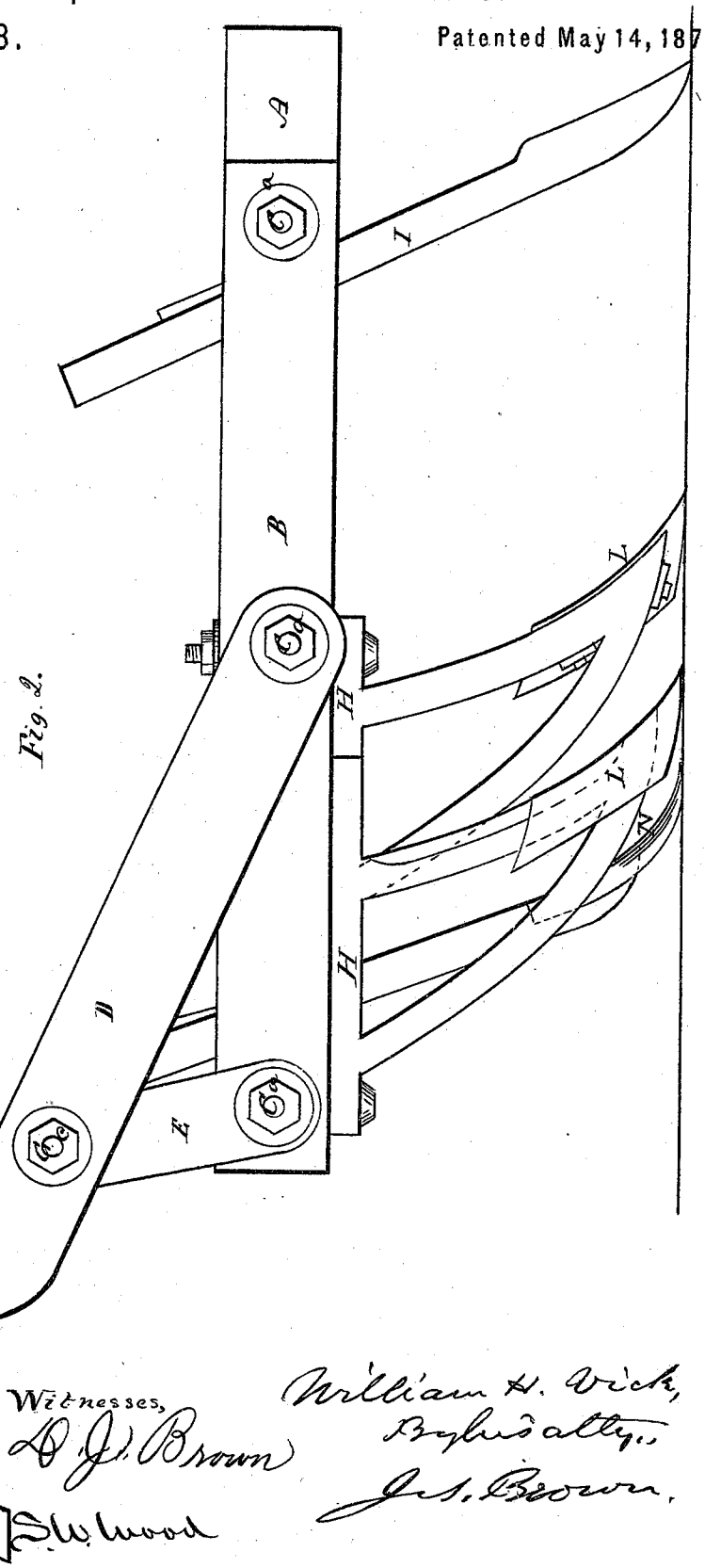

Fig. 2.

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WILLIAM H. VICK.

Improvement in Cultivators.

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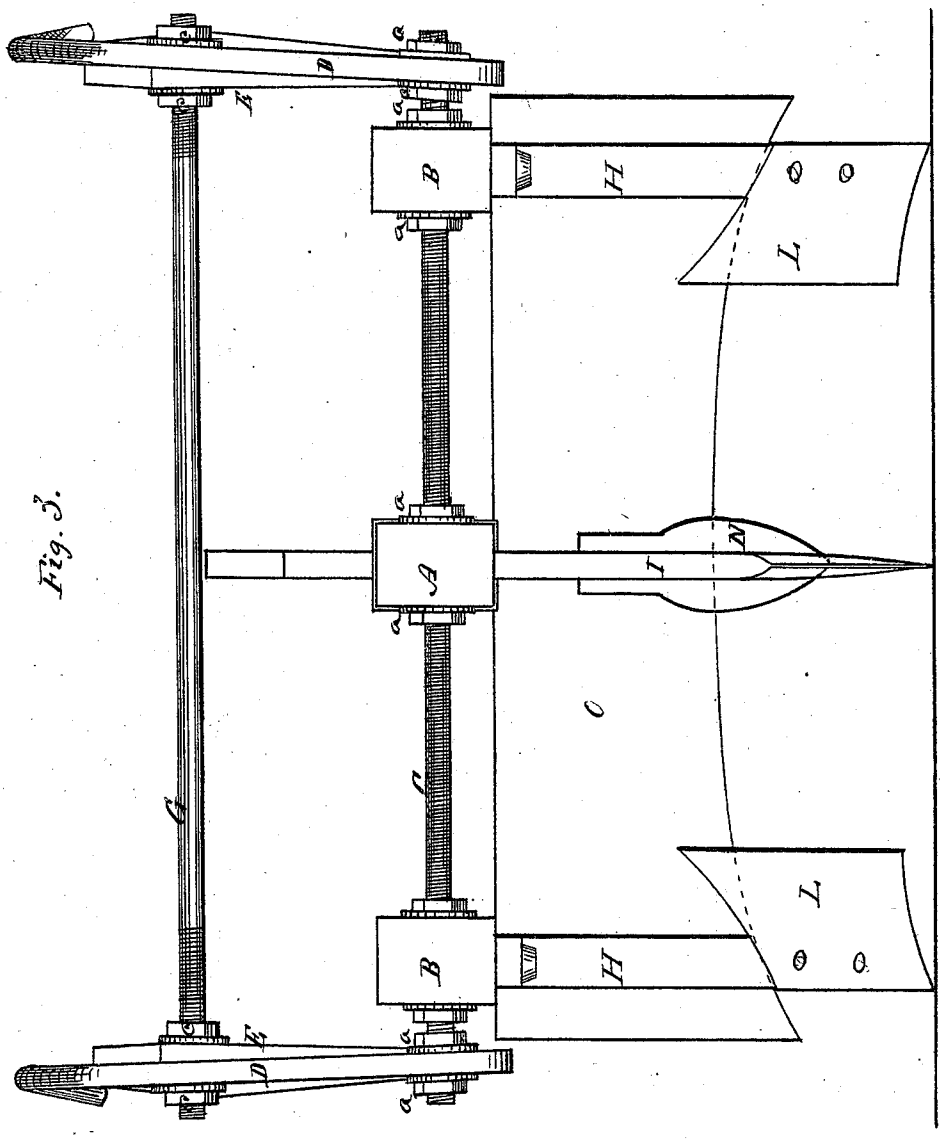

Fig. 3.

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WILLIAM H. VICK.

4 Sheets--Sheet 4.

Improvement in Cultivators.

No. 126,658.

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Fig. 5.

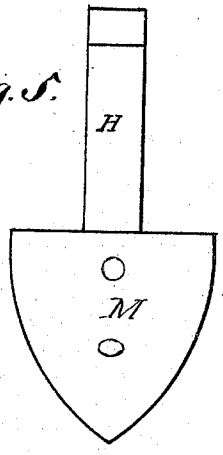

Fig. 6.

Fig. 4.

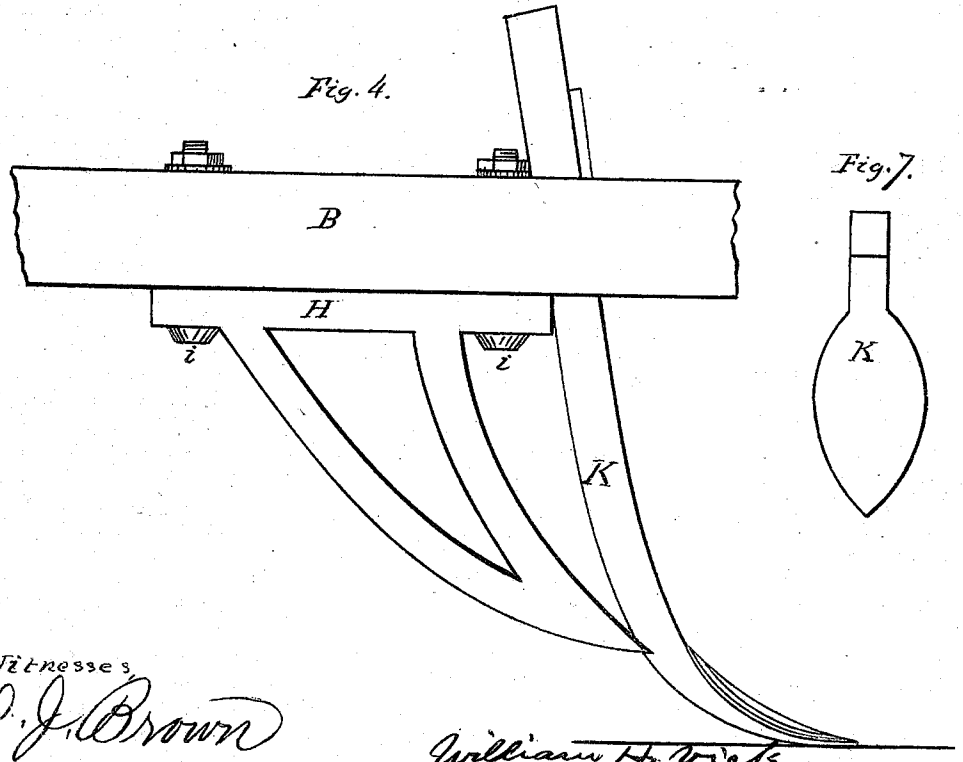

Fig. 7.

Witnesses
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D. W. Wood

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By his atty.
J. D. Brown.

UNITED STATES PATENT OFFICE

WILLIAM H. VICK, OF HOLLY SPRINGS, MISSISSIPPI.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 126,658, dated May 14, 1872.

To all whom it may concern:

Be it known that I, WILLIAM H. VICK, of Holly Springs, in the county of Marshall and State of Mississippi, have invented an Improved Cultivator adapted to various modes of tillage; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making part of this specification—

Figure 1 being a top view of the implement arranged for one kind of work to which it is adapted; Fig. 2, a side view of the same; Fig. 3, a front view thereof arranged for another kind of work; Figs. 4, 5, 6, and 7, views of several of the parts detached.

Like letters designate corresponding parts in all of the figures.

The nature of my invention consists in an improved adjustable and changeable implement capable of performing various kinds of work as a cultivator and gang-plow in a superior manner, the several features of improvement being set forth in the following description.

The frame has an improved construction adapted to the various purposes of the implement. It has only a central draft-beam, A, and two side beams, B B, made of wood, the center beam extending forward some six or eight inches further than the side beams to receive the draft-clevis. These beams are connected by three transverse iron rods, C C C, extending at right angles through them, and having screw-threads cut on all or a considerable part of the length thereof, in order to receive nuts *a a a a*, on both sides of each beam, to hold them in position, and to adjust them to any distance apart required. The center rod projects outward far enough beyond the side beams to receive the forward ends of the handles D D, and the rear rod also correspondingly projects to receive the lower ends of upright braces E E, the upper ends of which receive another transverse rod, G, also extending through the handles D D. The handles and uprights are likewise secured and adjusted on the rods C C by nuts *b b*, and similarly there are nuts *c c* to secure the upper ends of the uprights and the handles on the rod G, which has screw-threads cut upon it for the purpose. Thus the frame-pieces and handles are simply and firmly united by means which enable a complete adjustment of every part to be made to any extent desired, each independent of the other parts. The several beams A B B of the frame have a series of mortises, *d d*, *f f*, and *g*, in which the shanks of colters, cultivator-teeth, and plows of various forms for the several kinds of work to be done by the implement are secured. Three front mortises. *d d d*, of three beams, respectively, are situated near the front ends thereof, and may be in transverse line, as shown. The other two mortises, *f f*, of the side beams, respectively, are placed near the middle of the said beams, one, however, being nearer the front end and the other nearer the rear end of its beam; and the other mortise, *g*, of the center beam is near the rear end thereof. Thus from the front mortises there is a regular gradation of distances backward to the rear mortise, substantially as shown in Fig. 1. Also, in the rear parts of the side beams are, respectively, two vertical holes, *h h*, through which screw-bolts *i i* pass to secure to the under sides of the beams, respectively, cast-iron stocks or brace-barsH H, to which various mold-boards and shares may be attached, requiring much strength to sustain. The bolt-holes in one side beam are likewise situated further forward than those in the other beam, so that one mold-board or plow may move somewhat in advance of the other. Such colters, cultivator-teeth, shares, or mold-boards, or such combinations thereof, are inserted in the several mortises or attached to the brace-stocks, as are best suited to the particular kind of culture required in any case. Thus simple cultivator-teeth of ordinary and uniform kind may be used throughout for ordinary preparation or cultivation of the soil; but for most purposes combinations of colters, cultivator-teeth, and mold-boards are required. Generally all of the front mortises *d d d* may receive sword-cutting colters I I I. In the second mortises *f f* of the side beams, footed colters K K, for subsoiling frequently, are used. In the rear mortise *g* of the center beam either a footed colter or a cultivator-tooth, or a plow-share, varying in width, may be used, according to circumstances, in connection with different kinds and arrangements of mold-boards to be attached to the brace-stocks H H. Thus, if it is desired to turn the soil outward each

way, as in cultivating between the rows of plants, the stocks have oblique mold-boards L L, turning outward, as in Fig. 1; and in the rear mortise *g* there may be a footed colter to stir the subsoil between the side plows, or there may be a broad double-turning mold-board, M, as shown in Figs. 1 and 5, to cultivate the soil more thoroughly in the middle; and the side mold-boards may have footed colters before them in the mortises *f f;* or, if the soil is to be turned toward the middle from both sides, oblique mold-boards L L are arranged to turn inward, as in Fig. 3, this being done by shifting their stocks H H from one side to the other of the frame, while a narrow share, N, Fig. 3, may be used to open the soil in the ridge, as in preparing the soil for planting. When the side mold-boards are to be replaced by those arranged square across and turning both ways, brace-stocks H H, square across, are to be used, as in Figs. 4, 5, and 6; and they have notches in their front lower extremities, as shown at *l*, Fig. 6, in which the lower parts of the shanks of footed colters may fit to brace and sustain them, as seen in the same figure. When land is to be fallowed such an arrangement of footed colters may be used under the right side beam of the frame, and an inward-turning plow or mold-board under the left side beam. Then the subsoil colter runs in the last furrow, while the next furrow-slice turned over by the plow at the left side immediately covers the subsoil thus stirred up; or the implement may be used in laying off land into rows or drills, the footed harrow-teeth being used under the side beams for pulverizing the soil, while a hoe or narrow cultivator-share in the rear mortise *g* opens the furrow for seeds.

What I claim as my invention, and desire to secure by Letters Patent, is—

The stocks H H, in combination with the beams B B, said stocks being adapted to receive the mold-boards L L, or to serve as braces to the subsoil or foot-colter standards K K, substantially as and for the purpose herein specified.

W. H. VICK.

Witnesses:
A. Q. WITHERS,
W. PLATT.