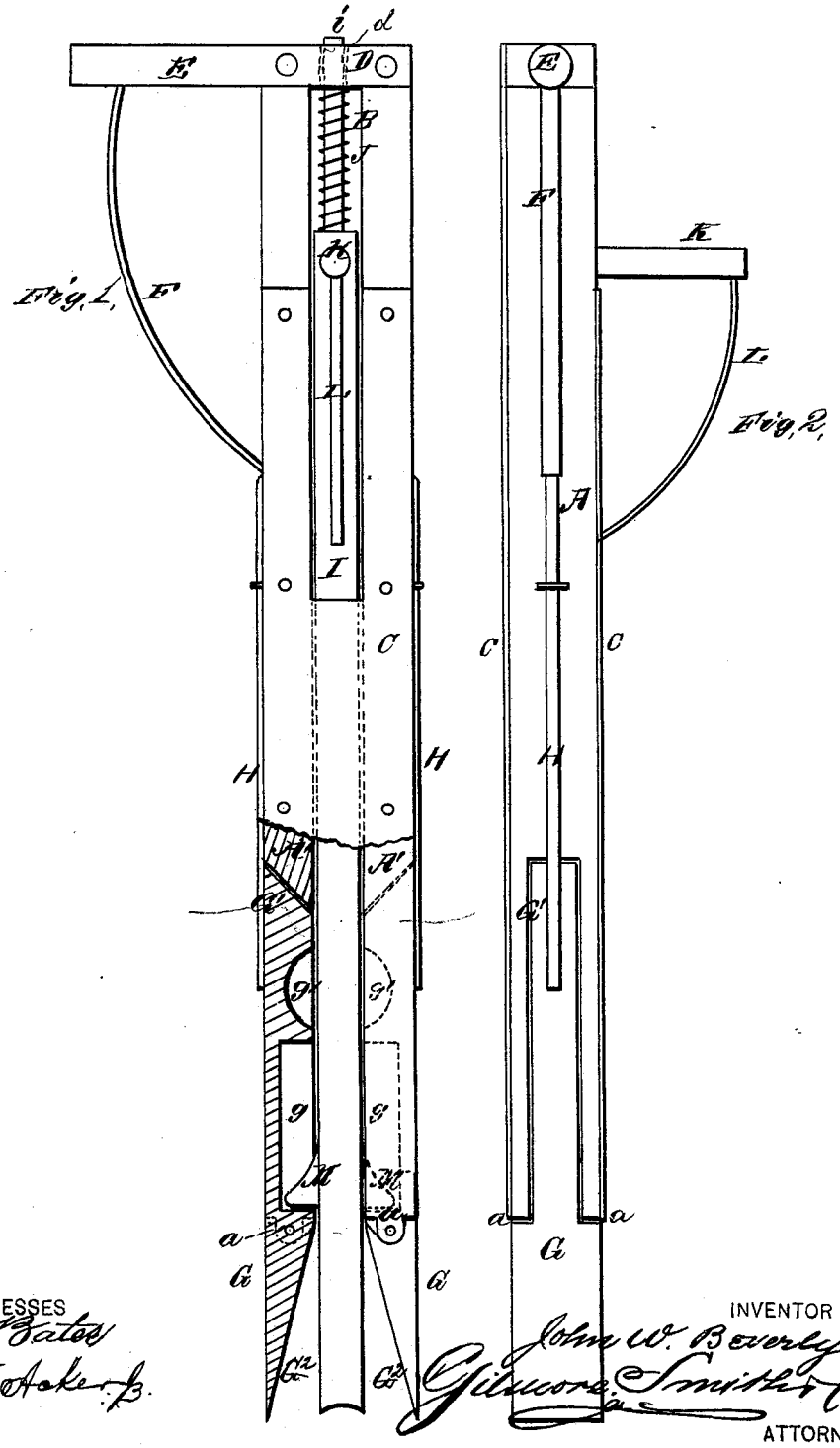
J. W. BEVERLY.

TOBACCO TRANSPLANTER.

No. 188,847. Patented March 27, 1877.



WITNESSES

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JOHN W. BEVERLY, OF LISBON, MISSOURI.

IMPROVEMENT IN TOBACCO-TRANSPLANTERS.

Specification forming part of Letters Patent No. **188,847**, dated March 27, 1877; application filed September 2, 1876.

To all whom it may concern:

Be it known that I, JOHN W. BEVERLY, of Lisbon, in the county of Howard and State of Missouri, have invented a new and valuable Improvement in Tobacco-Transplanters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my tobacco-transplanter, part sectional. Fig. 2 is an edge view of the same.

This invention relates to tobacco-transplanters; and it consists in the combination of hinged laterally-vibrating jaws with a vertically-reciprocating shaft, which is provided with lugs, that operate to force said jaws together when the said shaft is raised; also, in auxiliary devices, hereinafter particularly described.

In the annexed drawing, A designates the bed-piece or wooden casing of my device, which is constructed with a longitudinal central channel, B, and metal side plates C C, which protect the same. D is a wooden head, rigidly attached to said wooden casing, centrally perforated at *d*, and provided with a rigidly-attached wooden handle, E, which is additionally sustained by a metal brace, F. The bed-piece or wooden casing A consists of two longitudinal strips or bars, A′ A′, each of which is bifurcated at its lower end, forming extensions *a a*, with a space or recess between them. To the lower end of said extensions, and between the same, is pivoted on each side one of two jaws, G G. Each of said jaws consists of a narrow upper portion, G^1, which is above the pivot, and works in the recess between extensions *a a*, and of a broad head or jaw proper, G^2, which is beveled both on its outer and inner face, and brought to a sharp edge at its lower extremity. The upper end of portion G^1 is beveled to correspond to a similar bevel in the contiguous part of wooden strip or bar A′, so that said part G^1 is prevented from passing too far inward, and the outer face of jaw G remains flush with that of strip A′ when not operated by mechanism hereinafter described. H H are flat springs, each of which is secured at one end to strip or bar A′, while the other end presses against the upper part of G^1, and operates to hold jaw G even with said strip or bar, and to return it to that position after being displaced. Each of said upper parts G^1 G^1 is constructed with a long rectangular recess, *g*, immediately above the pivot of the jaw G, to which it belongs, and with a smaller concave recees, *g′*, a little above recess *g*. Both of said recesses are on the inside of said jaw.

I designates a rod or shaft, which is adapted to slide vertically in channel B and extend downward between jaws G. The lower end of said rod or shaft is made concave, and to the upper end of said rod or shaft is rigidly secured a cylindrical guide-rod, *i*, which passes up through perforation *d* in head D, and prevents ny lateral movement of said shaft I. J designates a coiled spring, which surrounds said guide-rod *i*, and bears at one end against head D, and at the other end against the top of shaft I. The office of said spring is to force said shaft downward when said shaft is released, thereby returning it to position for use. Said shaft is provided, near its upper end, with a horizontally-projecting handle, K, which is partly sustained by a metal brace, L. Said shaft is also provided with lugs M M, which are beveled on their upper sides and slide vertically in recesses *g g′*, as hereinafter described.

The operation of the device is as follows: The curved end of the shaft I is pressed gently against the plant, and forced down into the ground far enough for removing the same. The shape of said curved end will aid in protecting the tobacco-stalk from injury. Handle E, with the main part of the apparatus, is then held stationary, while handle K is then drawn upward, carrying shaft I with it. As lugs M M rise they engage the upper parts G^1 of jaws G at the upper ends of recesses *g*, thereby forcing together the lower parts G^2 of said jaws, and thereby compressing the earth about the roots of the plant. Rising still farther the said lugs enter recesses *g′* and lock jaws G in their contracted position. After the plant is removed and transplanted the device is readily restored to condition for use in transplanting another one by forcing down shaft I or pressing jaws G a little together.

I do not desire to confine myself to the materials herein specified, as in most cases others could be substituted without invention, nor to the precise construction shown. It is preferable to make the sharp bottoms or points of jaws G of steel, so as to penetrate the ground with the greatest possible facility. One of plates C must be somewhat cut away in its upper portion to allow the up and down movement of handle K. The apparatus may be applied to transplanting other plants besides tobacco.

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

1. The combination of jaws G G, each one of which has inner recesses *g g'*, with shaft I, having beveled lugs M M, substantially as and for the purpose set forth.

2. The combination of recessed jaws G G and flat springs H H with shaft I, having lugs M M, substantially as and for the purpose set forth.

3. The combination of shaft I, having lugs M M and guide-rod *i*, with spring J, recessed jaws G G, and head D, substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN W. BEVERLY.

Witnesses:
THOMAS B. HARRIS,
RICHARD W. SLY.