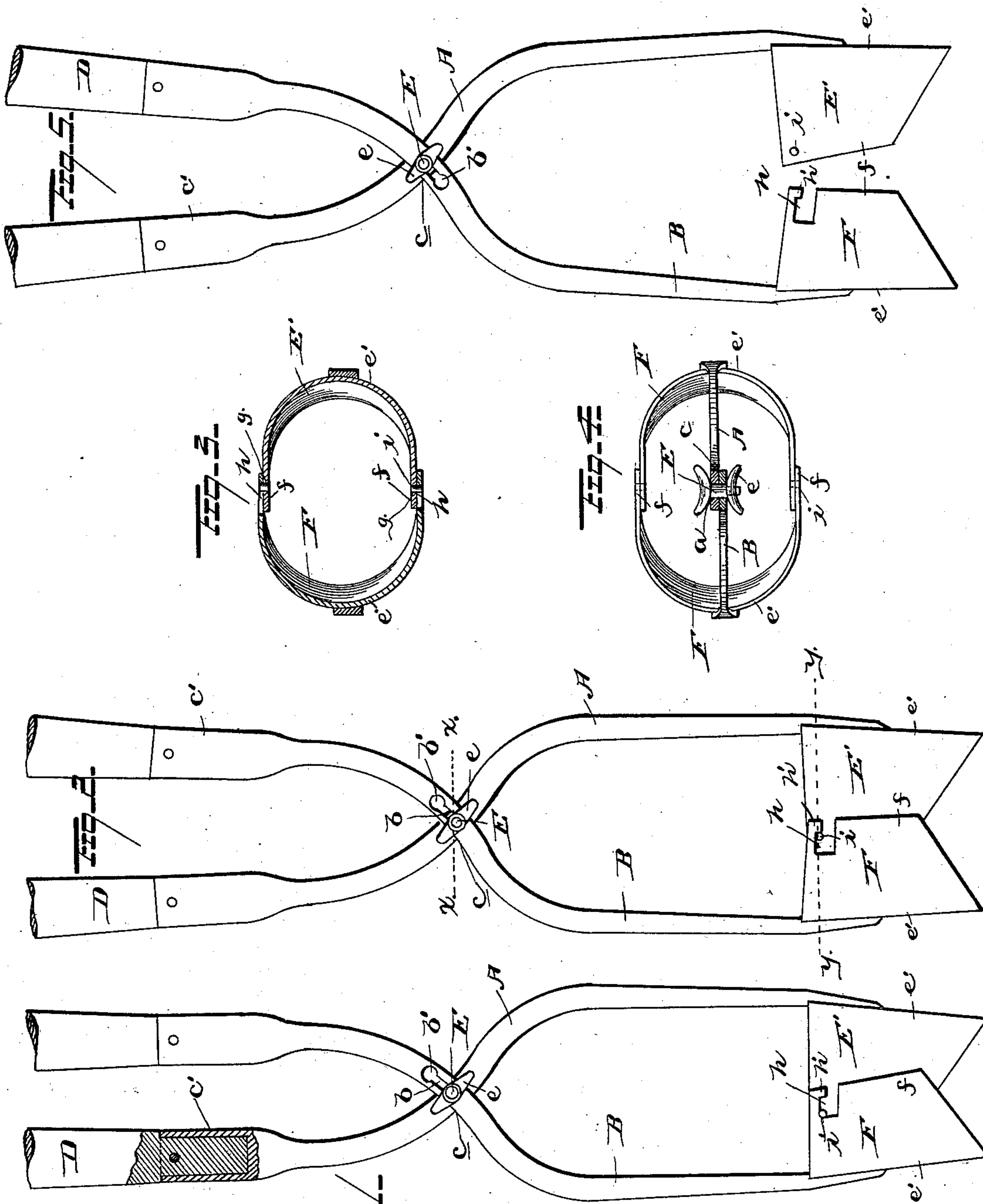


(No Model.)

G. L. SILSBY.
TRANSPLANTER.

No. 362,465.

Patented May 3, 1887.



Witnesses

Wm. T. Sill
E. G. Siggers

Inventor
G. L. Silsby

By his Attorneys

C. A. Anawala

UNITED STATES PATENT OFFICE.

GUSTAVUS L. SILSBY, OF MILES GROVE, PENNSYLVANIA.

TRANSPLANTER.

SPECIFICATION forming part of Letters Patent No. 362,465, dated May 3, 1887.

Application filed August 30, 1886. Serial No. 212,233. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVUS L. SILSBY, a citizen of the United States, residing at Miles Grove, in the county of Erie and State of Pennsylvania, have invented a new and useful Improvement in Transplanters, of which the following is a specification.

My invention relates to improvements in transplanters; and it consists of the peculiar combination and novel construction and arrangement of the various parts for service, substantially as hereinafter fully set forth, and particularly pointed out in the claim.

The object of my invention is to provide an improved planter of peculiar construction which will be capable of taking the plants out of the earth without squeezing them and the earth, and thus injure the delicate and tender roots thereof, which is liable to destroy the plants.

A further object of my invention is to provide an improved planter which can be very easily and readily adjusted to take up a larger plant or dig a larger hole than the hole to which it is normally set, and thus adapt the device to a wider range of usefulness, and, finally, to improve the device in minor details, so that it is simple, strong, and durable in construction, cheap and inexpensive of manufacture, and can be operated with great ease and with a minimum expenditure of power and exertion on the part of the operator.

In the drawings hereto annexed, Figure 1 is a side elevation of my improved planter, showing the jaws thereof distended. Fig. 2 is a like view of the device, showing the jaws closed. Figs. 3 and 4 are horizontal transverse sectional views on the lines *xx* and *yy* of Fig. 2, and Fig. 5 is a view of the device with one side of the jaws thereof separated to adapt it to dig a larger hole or remove a larger plant.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A and B designate the shanks of my improved planter, which are curved outwardly and then inwardly, at *c*, at a point about midway of their lengths, and provided at their upper extremities with hollow cylindrical sockets *c'*, in which the lower ends of the handles D are very securely fitted and held in any approved manner, so that the jaws can

be opened and closed with a slight exertion on the part of the operator, as will be more fully described presently. These curved portions of the shanks cross and lap each other, as shown, and at the point where they cross the shank A is provided with a transverse opening, *a*, and the shank B is provided with a longitudinal slot, *b*, the terminal ends of which are enlarged and rounded, as shown at *b'*.

E designates a transverse pivot-bolt, which passes through the opening *a* and the lower terminal end of the longitudinal slot *b*, and this pivot-bolt has a threaded end, on which a nut, *e*, is detachably fitted to hold the pivot-bolt and the shanks together and permit them to be disconnected, so that the shank B can be raised or lowered to adapt the pivot-bolt E to enter one or the other of the terminal ends of the longitudinal slot, for a purpose presently described.

E' F designate the jaws of the planter, which are rigidly affixed to and carried by the lower ends of the shanks A B of the device. These jaws are connected together to form a chamber or receptacle into which the earth, or plants and earth, are to be fitted and carried. Each jaw is provided with a semicircular or curved rear side, *e'*, and the flat parallel sides *f*, and the rear and flat sides of the jaws are formed of a single piece of metal. The jaws are inclined or reduced toward their lower ends, so that when they come together they form a chamber or receptacle which is smaller at its lower end than at its upper end, as shown in Figs. 3 and 4 of the drawings. The upper forward edges of the flat sides *f* of the jaw E' are provided with transverse openings or perforations *g*, and the inner upper edges of the corresponding sides, *f*, of the jaw F are provided with slots *h*, which open through one of the edges of the sides *f* of the jaw F, and provide depending lips or shoulders *h'*, which extend into those parts of the slots which open through the edges of the jaw F. The meeting edges of the flat sides of the jaws E' F overlap one another, as clearly shown in Figs. 3 and 4, and through the transverse openings of the jaw E' and the slot of the jaw F passes pivot pins or studs *i*, which connect the said jaws together, so that they can be moved laterally of each other, as is required in the operation of transplanting.

This being the construction of my improved transplanter, the operation thereof is as follows: The removable pivot-pin that connects the curved shanks of the implement together normally rests in the semicircular portion *b'* at the lower end of the longitudinal slot, and the pivot-pin *i* works in the slots *h* in rear of the depending shoulder *h'*, so that they are not liable to become detached. In order to insert the device in the ground to remove a plant therefrom, the upper ends of the handles *D* are separated, and thus separate the jaws and cause them to be moved away from each other. The jaws are now forced into the ground around the plant to be removed, and the device elevated out of the ground and carried to the proper place or point where it is desired to plant the plant therein.

By means of the peculiar tapering form of the jaws, with the lower end made smaller than the upper end, the plant is retained between the jaws without forcing the upper ends of the handles and shanks together, so that the operator is not required to exert pressure on the handles in order to prevent the plant from falling from the jaws; and I attach especial importance to this feature, as I am enabled to thereby provide a device which obviates the necessity of forcing the jaws together upon the plant after the removal thereof from the ground, as this operation is liable to injure the delicate roots of the plant and thus destroy the same.

It will thus be seen that I provide an improved transplanter which can be operated with great ease by the operator and with a minimum of power, and that the device does not injure the delicate roots of the plants in transferring them from one part of the field to the other.

In order to adapt the jaws to dig a larger hole in the ground, or to remove a larger plant

from the earth, the pivot *i* is removed from the jaws by slipping it through the open slots and beneath the depending lip *h'*, the pivot *E* having been first elevated to the upper terminal end of the longitudinal slot *b* of the shank *B*, and the latter thereby dropped down, so that the lower edge of its jaw lies beneath the lower edge of the jaw on the corresponding shank, *A*. The jaws *E' F* can thus be separated to a greater or less extent by properly manipulating the handles, which in turn operate the shanks and the jaws, as will be very readily understood.

My invention is very cheap and inexpensive of manufacture, thoroughly effective and reliable in operation, simple and durable in construction, and capable of use with great ease.

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

In a transplanter, the combination of the curved shanks *A B*, the latter having the longitudinal slot *b*, the handles secured to the shanks, the pivot-pin passing through the slot of the shank *B* and the shank *A*, and having a binding-nut, the laterally-movable jaws *E' F*, carried by the lower ends of the shanks and inclined downwardly and forwardly, and provided with the curved rear sides and the lapped meeting edges, the inner edges of the jaw *F* being provided with open slots and the depending lip, and the pins *I*, passing through the slots of the jaw *F* in rear of the shoulder, and also through the jaw *E'*, substantially as described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GUSTAVUS L. SILSBY.

Witnesses:

JEFFREY GODFREY,
H. A. TRAUT.