

SEDGWICK & BROOKS.

Fruit-Gatherer.

No. 4,792.

Patented Oct. 3, 1846.

Fig. 2.

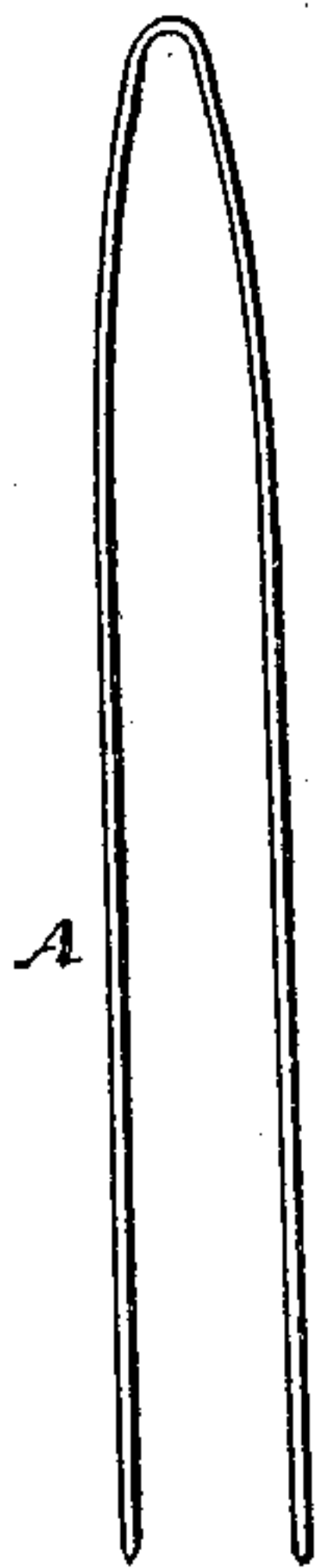


Fig. 3.

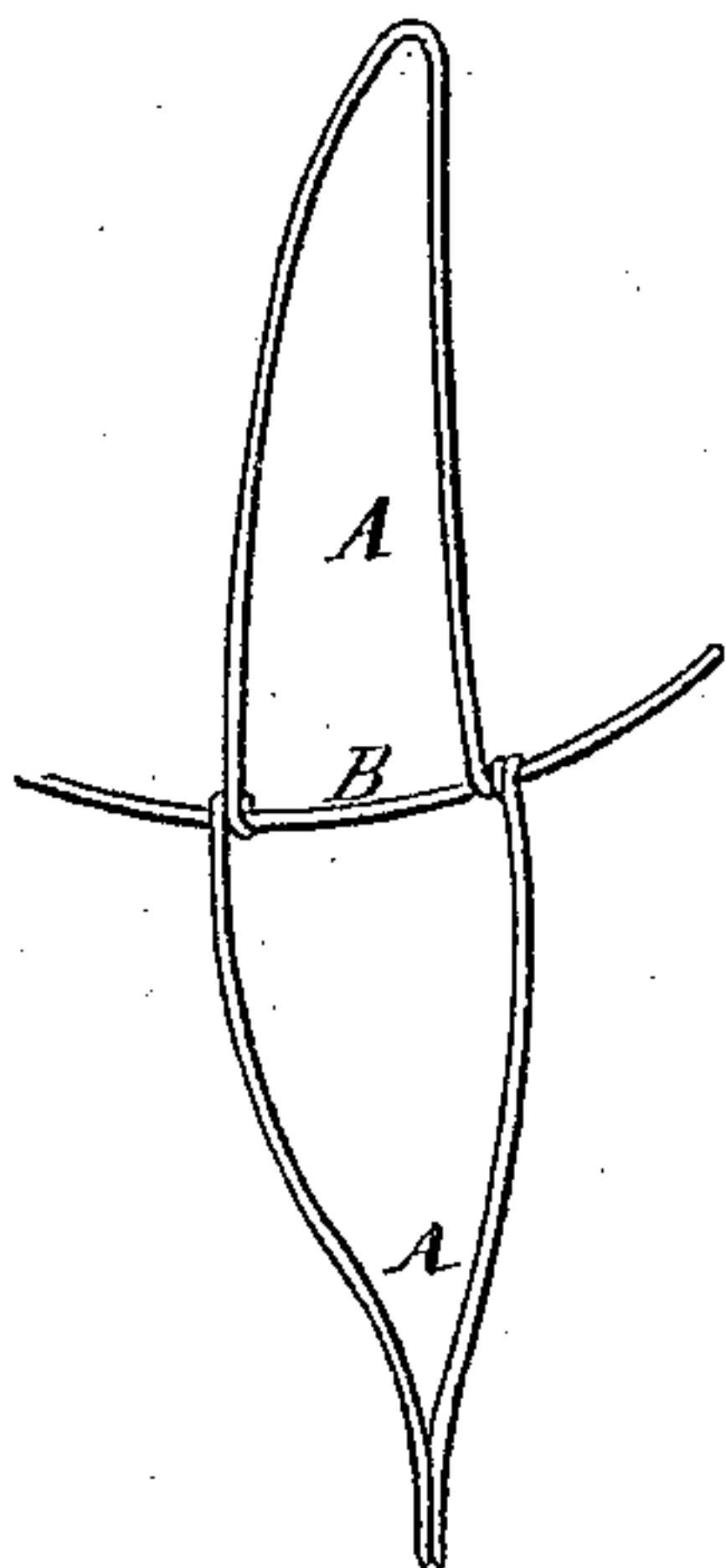


Fig. 4.

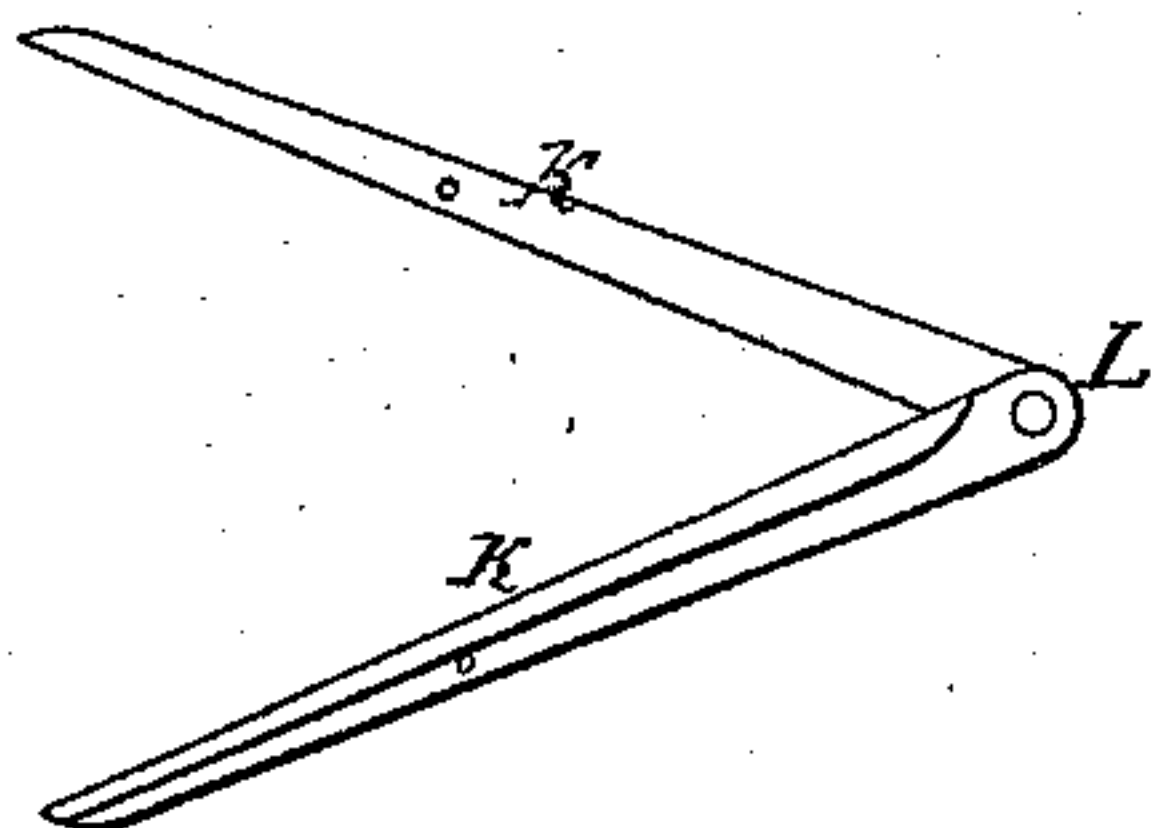
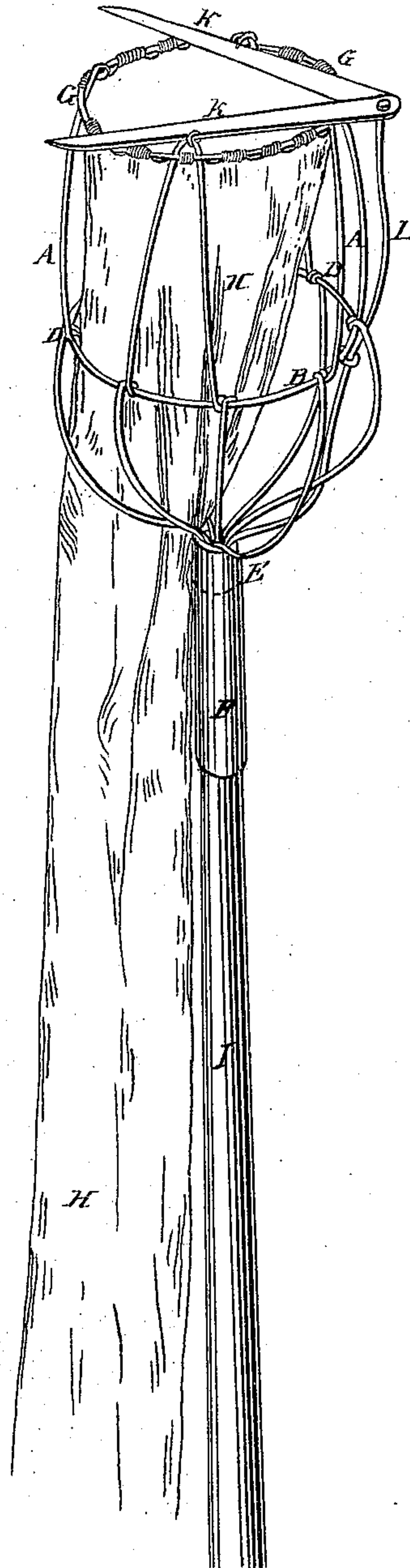


Fig. 1.



UNITED STATES PATENT OFFICE.

WM. SEDGWICK AND JNO. BROOKS, OF POUGHKEEPSIE, NEW YORK.

IMPROVEMENT IN FRUIT-GATHERERS.

Specification forming part of Letters Patent No. 4,792, dated October 3, 1846.

To all whom it may concern:

Be it known that we, WILLIAM SEDGWICK and JOHN BROOKS, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and useful Instrument for Gathering Fruit, called the "Patent Hose Fruit-Gatherer," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a perspective view of the instrument. Fig. 2 is the spring-wire after having received the first bend to form the finger. Fig. 3 is the same wire bent or coiled around the fixed ring forming the finger and shanks; Fig. 4, the cutters or shears.

This instrument consists of a series of double elastic fingers, A, made of steel wire in a form approximating to that of the human finger when slightly bent to grasp an article extended from a circular ring, B, of greater diameter than the fruit to be gathered, which is to pass through said ring, the piece of wire forming each finger being first bent to the form represented in Fig. 2, or other form analogous thereto, and then to the form represented in Fig. 3, the coils at D being extended around the aforesaid ring, and the two ends being brought together and inserted into a socket, E, at the head of the rod, and properly secured by a ring or ferrule, F, or other means, by which arrangement the portion of the aforesaid bent wire between the ring B and the socket E will become elastic shanks, while the portion above the ring B, forming the finger, will also be elastic, and there being a series of bent wires formed and arranged in a similar manner around the circumference of the ring, will produce a machine resembling the human hand when in the act of grasping a spherical object, like a peach or other article. Now, in order to close these fingers around and against the fruit to be gathered, a sliding circular ring, G, is put around the upper portions of the fingers A, on the outside and in contact therewith, at a point where the circle is less than the diameter of the fixed ring B, and greater than the circle in which the upper ends of the rings are placed, said ring G being made to approach the stationary ring B by means of a flexible piece of hose, H, attached to the ring G, which is to be laid hold of by the fruit-gatherer and drawn downward; and in order to expand the

fingers the hose is to be slackened by the operator. The said hose H is to be of a diameter a little greater than that of the fruit to be gathered, and is attached by its upper end to the ring G by sewing or otherwise. It passes down through a space between the wires A to the basket that is to receive the fruit, or to some other place, when desired.

The principal object of this hose, in addition to that of serving as a cord by which to draw down the contracting and expanding ring G, is to conduct the fruit gently from the tree to the basket without bruising it, the friction of the fruit against the inside of the hose preventing the too rapid descent of the fruit. The rod or pole I, by which the fingers and hose are raised to the fruit, may be made in one or more pieces. The cutters K, for separating the stem of the fruit from the tree, are connected to the apparatus at the top thereof, or other convenient place, and are closed at the time the elastic fingers are closed, being attached to two of them, and are opened at the moment the fingers are expanded, the point or pivot on which they turn being a bent rod, L, passing through a coil in the stationary ring and extended down into the socket E of the handle I.

In order to gather fruit the operator raises the apparatus by the pole I until the fruit is surrounded by the fingers A. He then lays hold of the hose H and pulls it downward. This draws down the ring G and closes the shears and cuts the stem, and simultaneously closes the fingers A around the fruit. The hose is then slackened, which allows the fingers to expand and the ring and hose to rise, when the fruit will descend into the hose and be conducted to the basket or to the hand of the operator, or other place where desired, as above stated.

The several parts of the apparatus may be made of any suitable material and of any convenient size, according to the purpose for which it may be designed, whether for gathering fruit or for any other purpose.

When it is not desired to cut the stem the knives K may be removed and the apparatus used without them, the fingers, after being closed around the fruit, being drawn gently downward or twisted slightly to the right or to the left, which will separate the fruit from the tree, as aforesaid.

The hose may be used for conducting fruit when gathered in the usual manner, the hose being detached from the apparatus for that purpose.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of the elastic fingers and sliding ring, arranged and operated in the manner and for the purpose set forth, whether constructed precisely in the manner described or other mode substantially the same.

2. A pair of shears or cutters attached to the instrument on the top, or otherwise placed,

for the purpose of cutting off the stem of the fruit, if desired, said shears being closed by the closing of the elastic fingers.

3. The flexible hose for conducting the fruit, as set forth, in combination with the apparatus for gathering it, operated in the manner set forth.

WM. SEDGWICK.
JOHN BROOKS.

Witnesses:

CHARLES BROOKS,
JOHN CALLEN.