

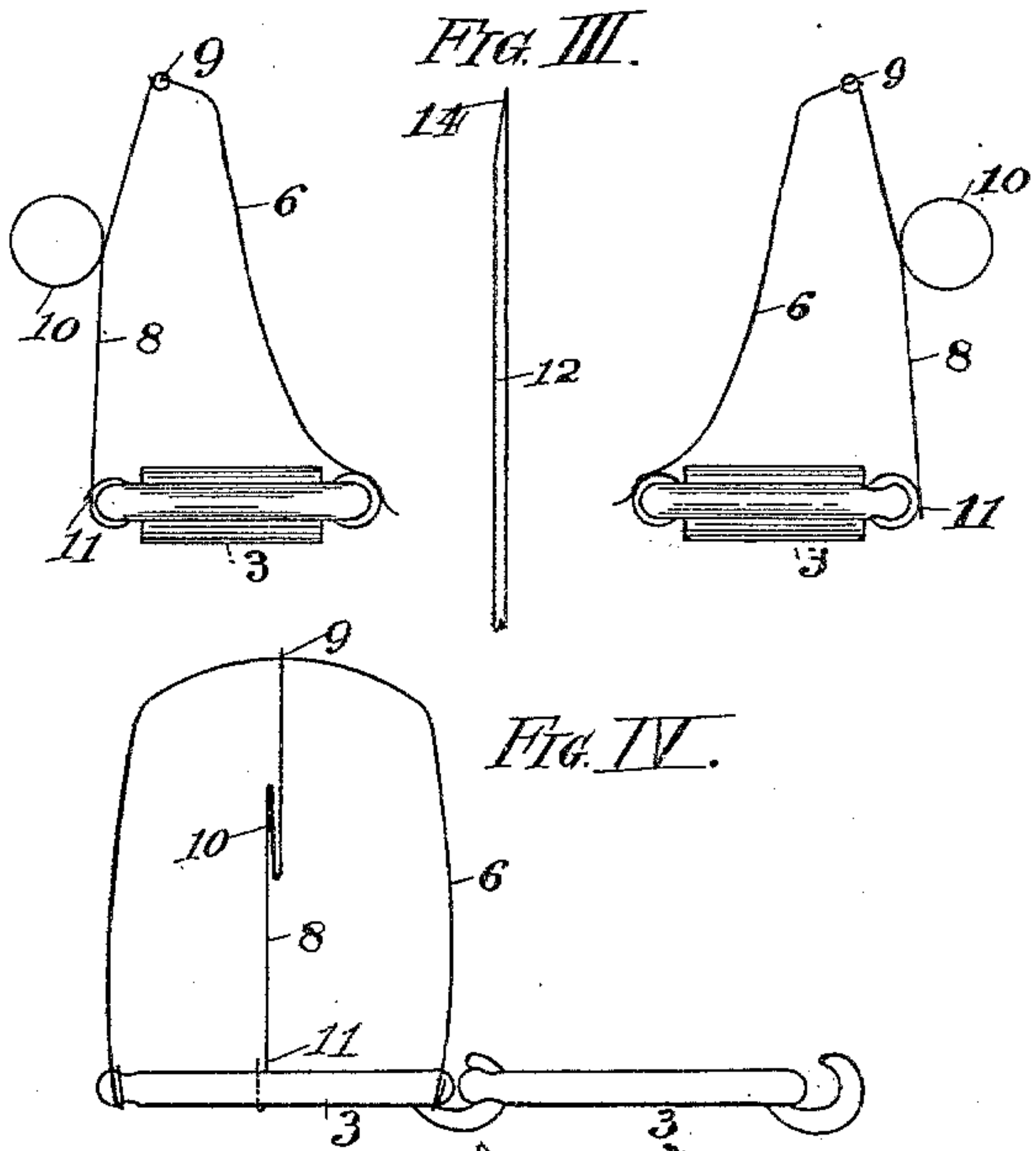
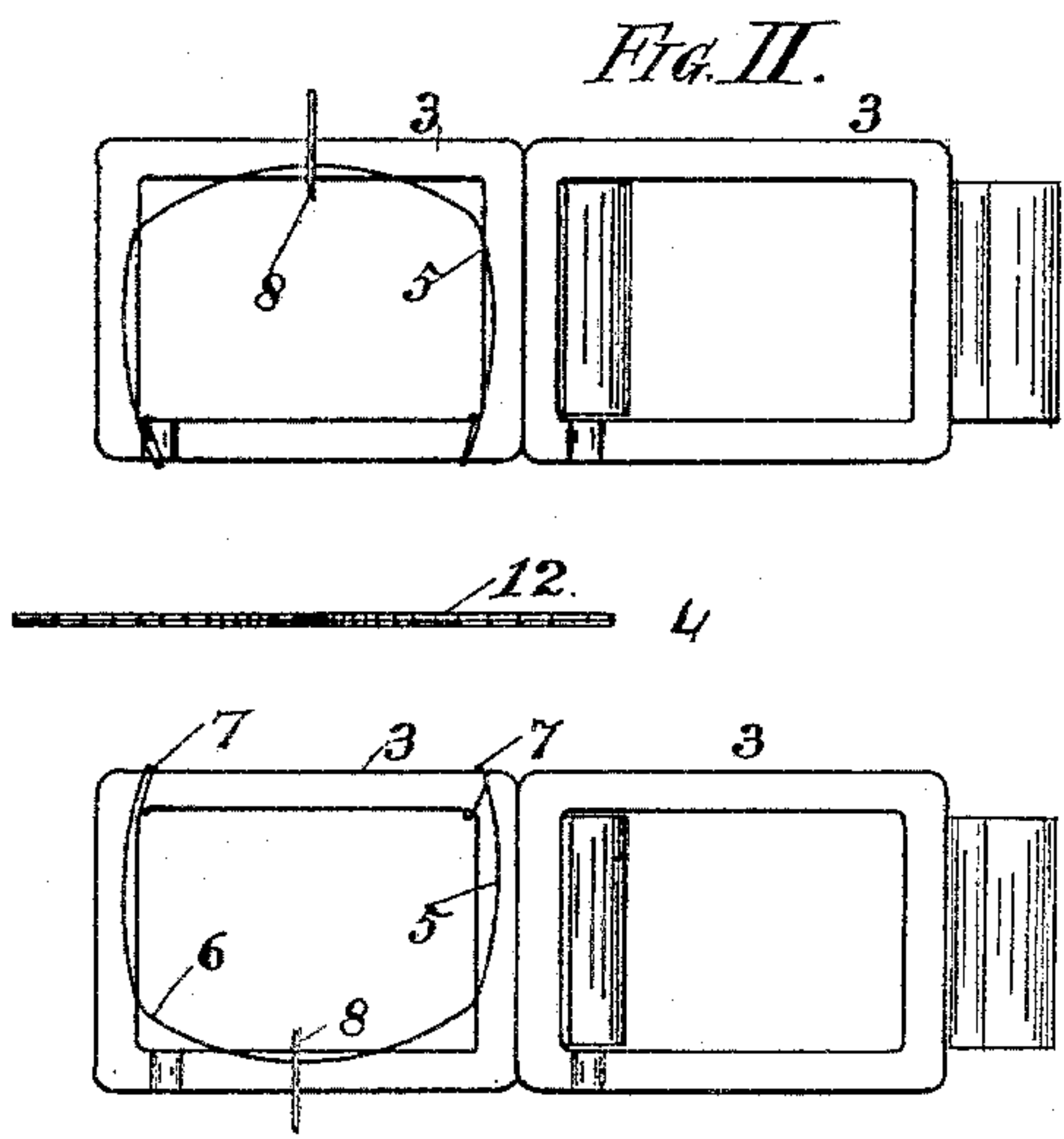
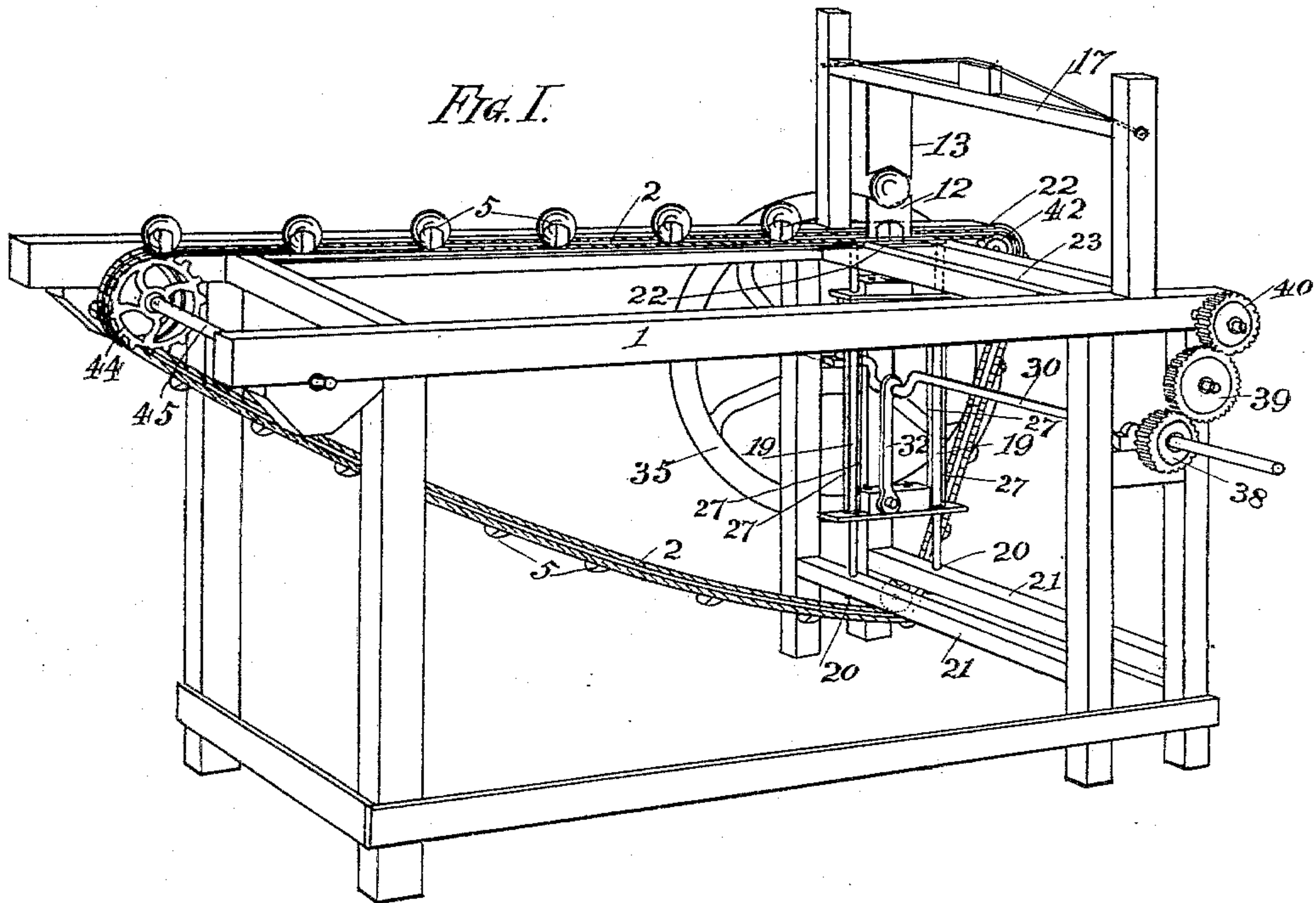
(No Model.)

2 Sheets—Sheet 1.

G. E. GRIER.
PEACH PITTING MACHINE.

No. 596,935.

Patented Jan. 4, 1898.



Witnesses:
Robt. Tram.
J. A. Roslopes

Inventor.
G. E. Grier.
Wright & Gray,
Attorneys.

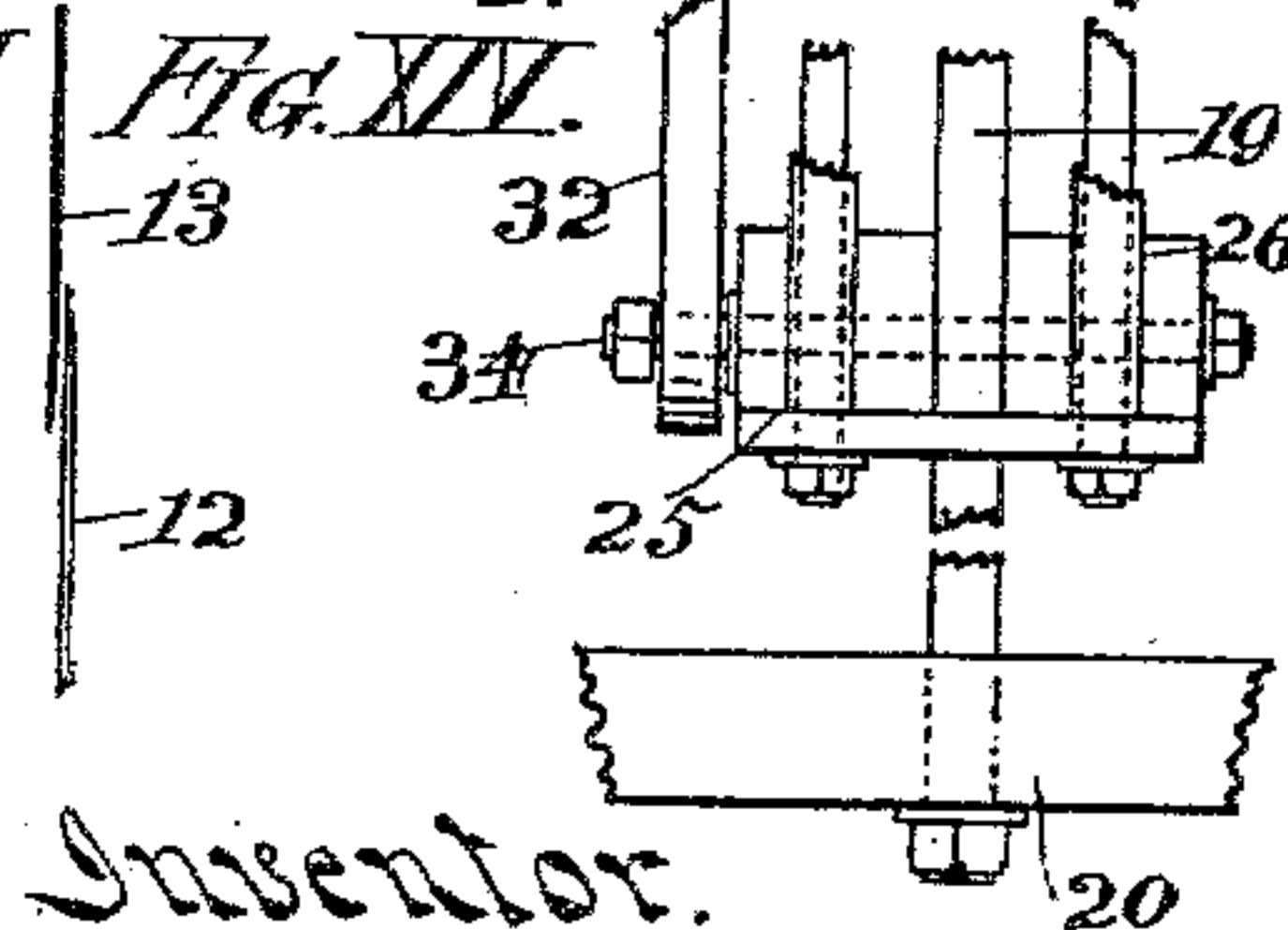
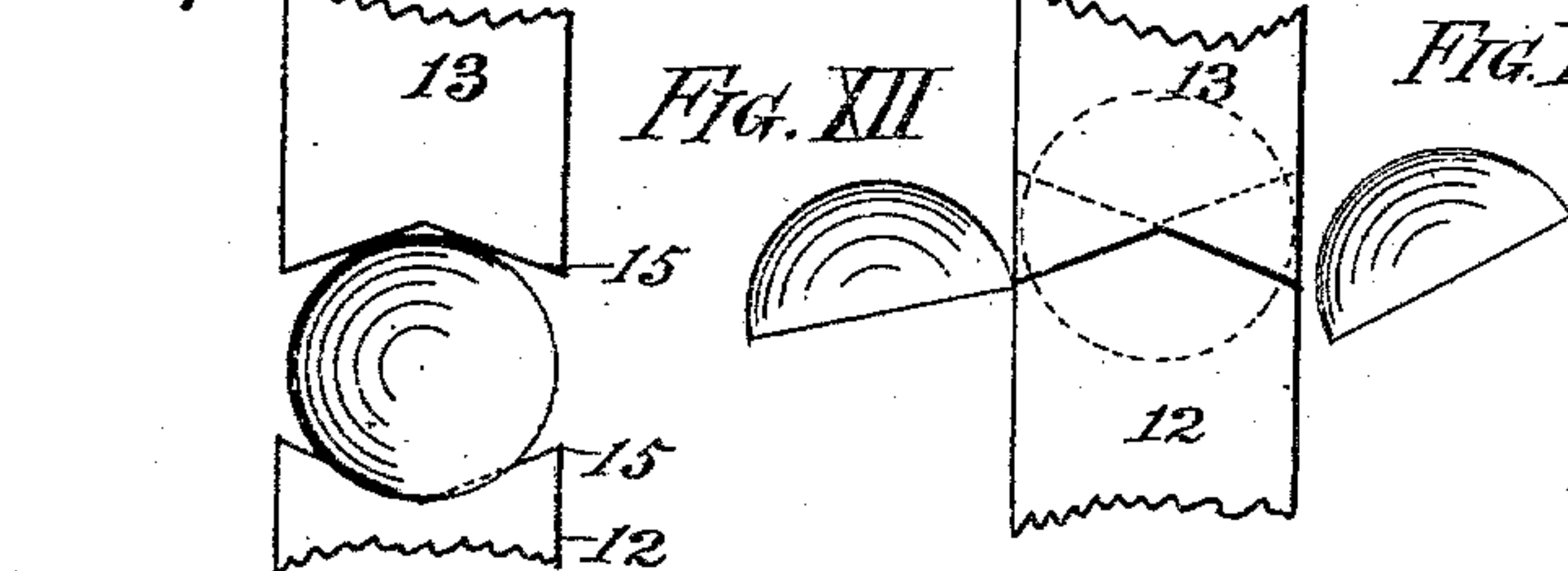
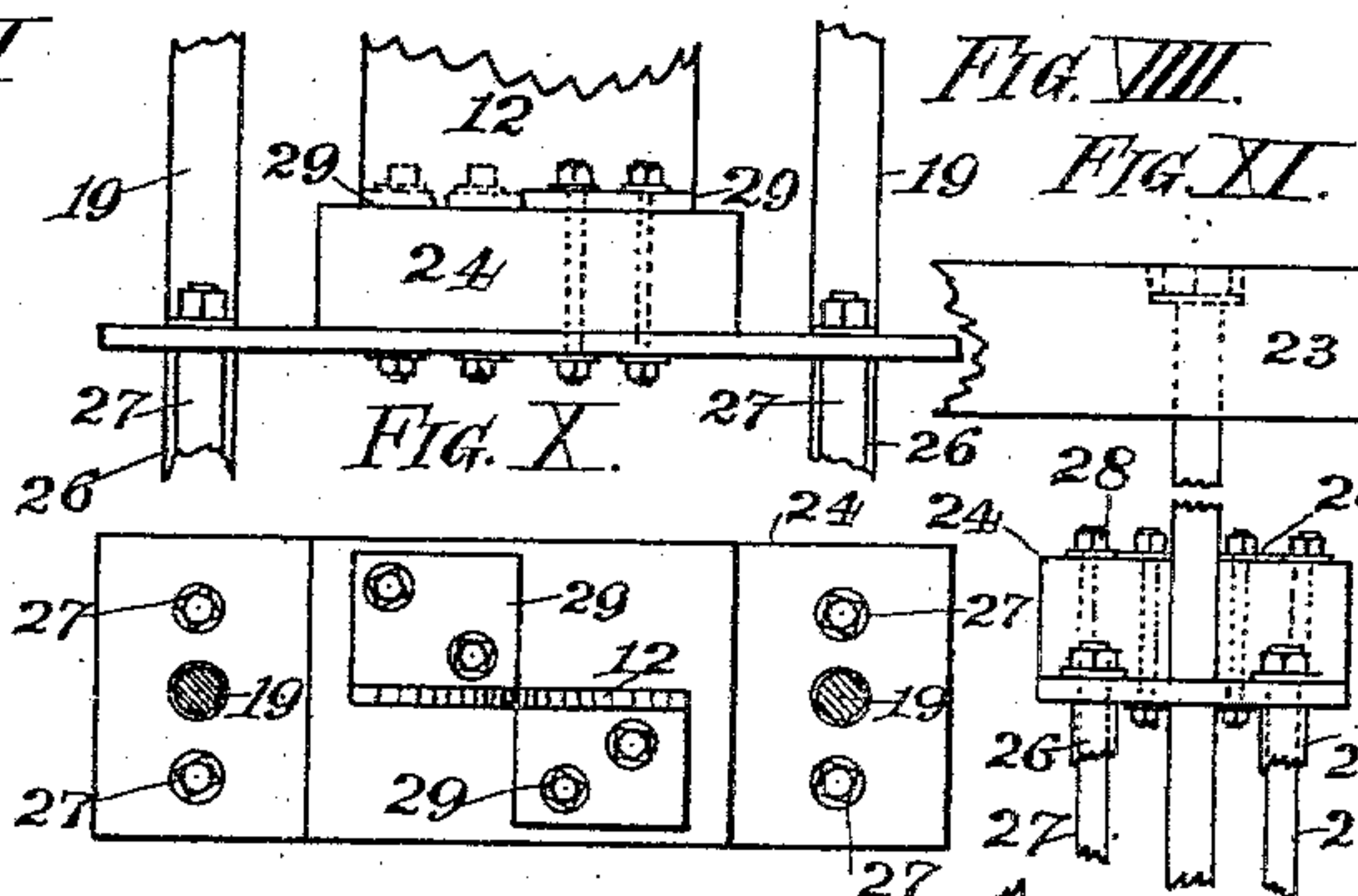
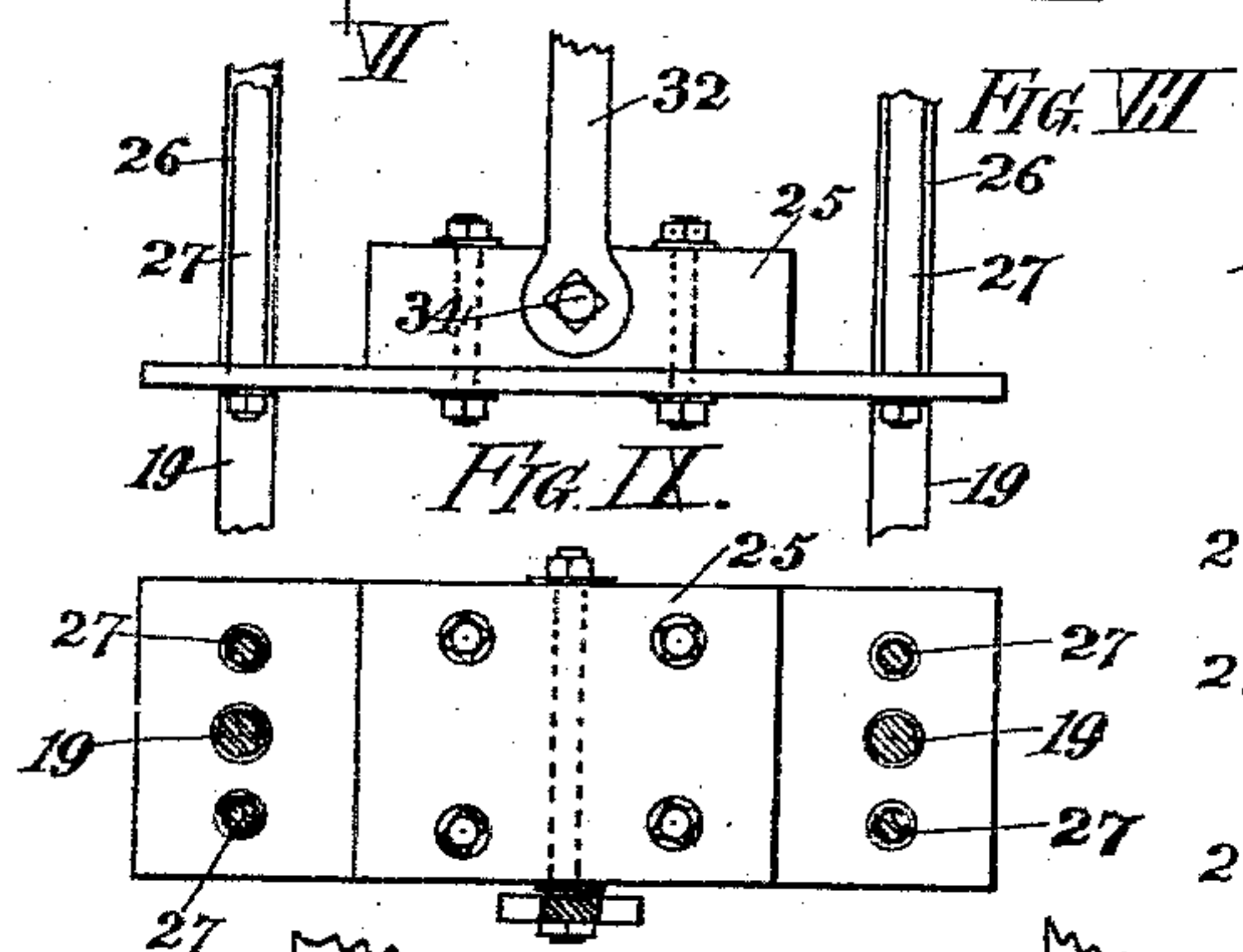
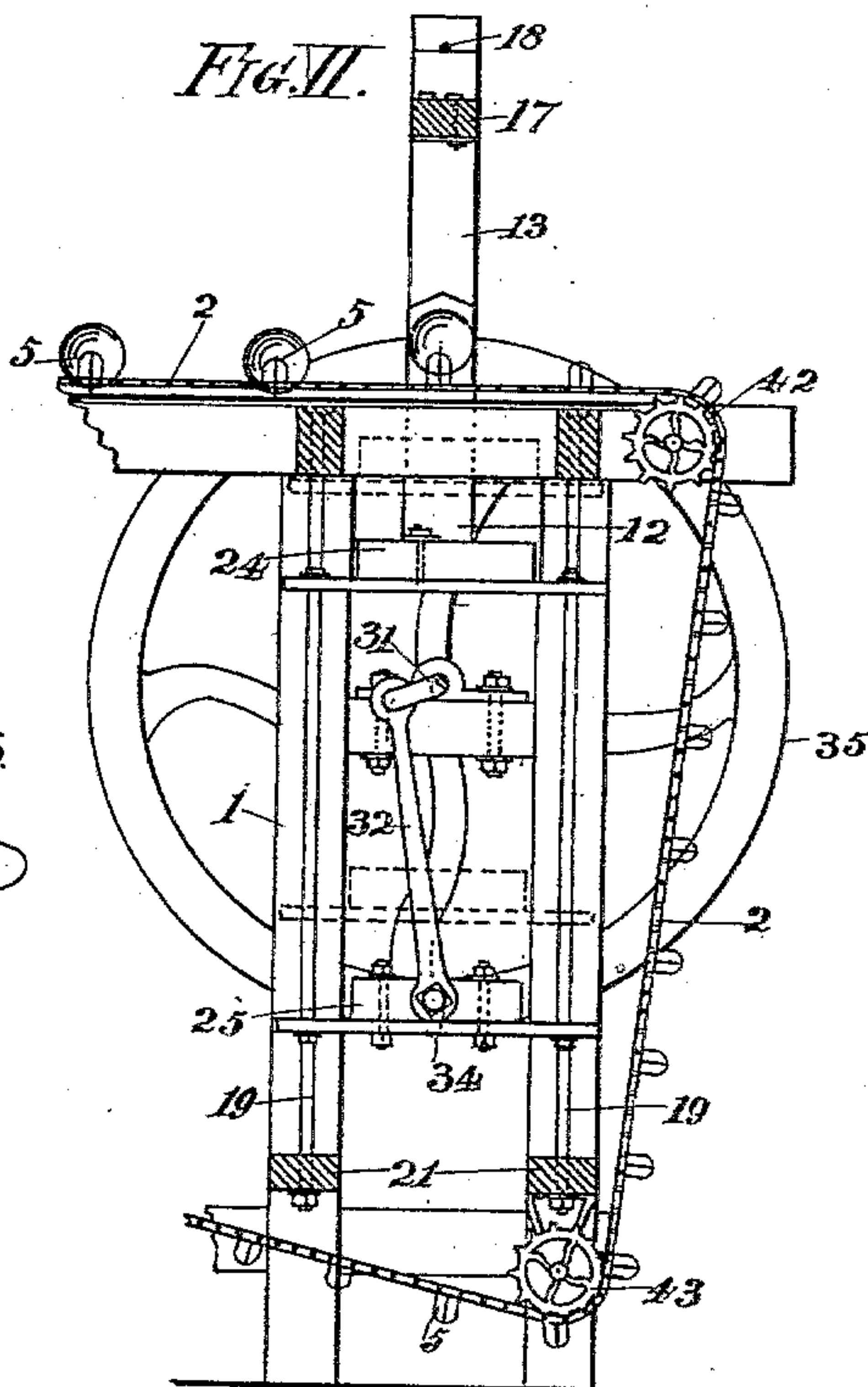
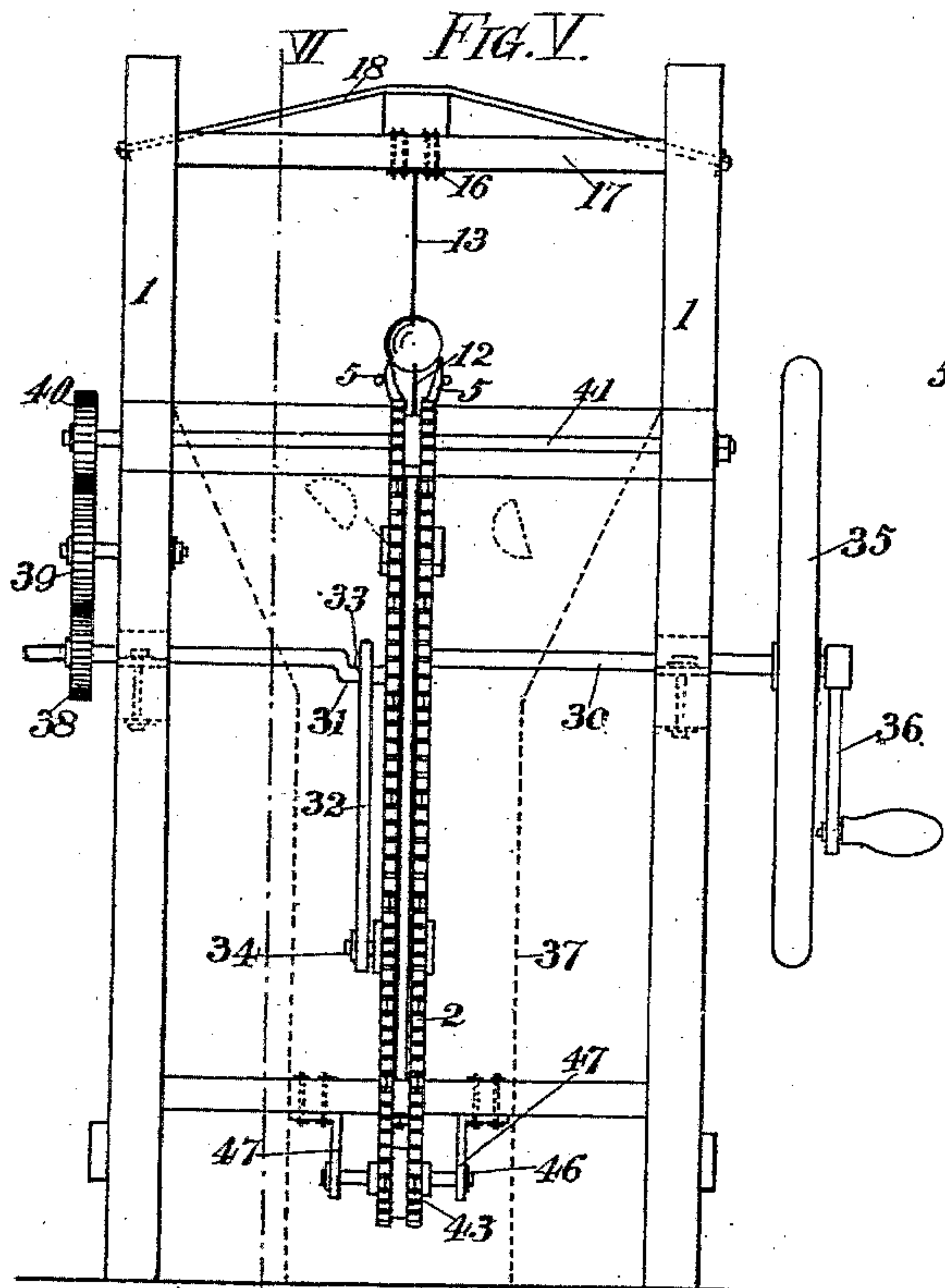
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2 Sheets—Sheet 2.

G. E. GRIER.
PEACH PITTING MACHINE.

No. 596,935.

Patented Jan. 4, 1898.



Witnesses:
Robt. Tamm
J. A. Rorlofer

Inventor.
G. E. Grier.
by
Knights Bros.
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE E. GRIER, OF POMONA, CALIFORNIA.

PEACH-PITTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 596,935, dated January 4, 1898.

Application filed March 9, 1897. Serial No. 626,564. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. GRIER, a citizen of the United States, residing at Pomona, in the county of Los Angeles, State of California, have invented certain new and useful Improvements in Peach-Pitting Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved machine for severing peaches and splitting the stones of the same in one action, said machine being also applicable to the dividing of other fruits, if found desirable; and my invention consists in certain features of novelty hereinafter described and claimed.

Figure I represents a perspective of my improved machine. Fig. II represents a plan view of the double carrying-chain with the interposed knife for severing the peaches. Fig. III represents an end elevation of the carrying-chain with holders thereon. Fig. IV represents a side elevation of one of the carrying-chains and a spring-holder for holding the fruit. Fig. V represents an end elevation. Fig. VI is a vertical section taken on line VI VI, Fig. V. Fig. VII is a detail view showing the connection of the lower end of the pitman. Fig. VIII is a detail view showing means of securing the lower knife to its movable support. Fig. IX represents a bottom view of the movable block to which the pitman is pivoted. Fig. X represents a top view of the block to which the lower knife is secured. Fig. XI is a detail view showing blocks for operating the knife and the means for connecting and guiding said blocks. Fig. XII represents a side elevation of the knife in position to sever the peach. Fig. XIII represents a side elevation of the knife in its position when the peach is severed. Fig. XIV represents an edge elevation of the knife in its position after the peach is severed.

Referring to the drawings, 1 represents the frame for supporting the operating mechanism of my improved machine.

2 represents the carrying belt or chain, preferably made in the form of a drive-chain having separable links 3, said drive-chain be-

ing double and having an intervening space 4. To each of said drive-chains, at intervals thereon, are secured the fruit-holders 5, one-half of each holder being secured to each of the chains directly opposite. The holder consists of a bail-shaped spring-wire 6, having its lower end secured at 7 to the inner portion of the link and having its upper end supported by a spring-wire 8, said spring-wire having its upper end looped at 9 around the holder 6, having an intermediate coil 10 in order to give it strength and spring force and having its lower end secured at 11 to the carrying-chain.

The portion 6 of the holder is curved backwardly in the proper form to receive the sides of the peach and hold it firmly until the knife severs the same. The knife is formed of two parts 12 13, having beveled cutting edges 14 for severing the peach and pit. The cutting edges of the knife are formed with concave or V-shaped contours 15, the corners of said knives being nearer to the corners of the opposite knife than the centers of the same, the result being that the peach is held in the depression or cradle formed thereby until the same has been severed. (See Figs. XII and XIII.) The upper knife 13 is secured at 16 to a cross-frame 17, over which is placed a truss 18 for supporting the upper end of the frame of the machine.

19 represents guide-rods having their lower ends secured at 20 to cross-frames 21 and their upper ends secured at 22 to cross-frames 23.

24 represents an upper block, and 25 a lower block, adapted to travel vertically upon the guide-rods 19. The blocks 24 25 are spaced apart and held in said position by means of tubes 26, placed between the blocks, and also by means of rods 27, extending through the tubes 26 and having their upper and lower ends bolted to the blocks. The lower knife 12 is bolted at 28, through flanges 29, to the upper block 24, said flanges 29 extending at right angles with the base of the knife and by a turned-up portion of the same, thus forming an extended base for the knife that prevents its vibration.

30 represents an operating-shaft having a crank 31 thereon.

32 represents a pitman having its upper end journaled at 33 to the crank 31 and its lower end pivoted at 34 to the lower block 25.

35 represents a balance-wheel on the shaft 30, and 36 a crank for rotating said shaft.

I have shown my device adapted to hand-power, but it can of course be readily adapted for steam or other power by placing a pulley on the shaft 30 in place of the crank 36. As the shaft 30 is revolved it will cause the pitman 32 to raise the lower block 25, carrying with it the upper block 24 and the lower knife 12 until the knife passes the lower edge of the upper knife, thus severing the peach or other fruit, cutting entirely through the peach and pit and permitting them to drop into a chute 37. (Shown in dotted lines, Fig. V.)

38 represents a gear-wheel on the opposite end of the shaft 30, said gear meshing with the idle-gear 39, which in turn meshes with a gear 40 on a shaft 41.

42 represents a sprocket-wheel on the shaft 41, with which the drive-chain that carries the peach meshes, thus carrying the chain along as the knife 12 is reciprocated.

43 represents a sprocket-wheel situated at the lower forward end of the frame 1, over which the chain 2 passes, and 44 represents a sprocket-wheel on a shaft 45, situated at the rear end of the frame 1, which also forms a bearing for the carrying-chain. The sprocket-wheel 43 has its shaft 46 journaled to supporting-brackets 47.

In operation the peaches are placed by the operator or operators into the spring-holders 5, care being taken to place the peach in the proper position to sever the pit on the desired line, the spring-holders firmly grasping the peach on each side and adapting themselves to any size of peach placed therein, and as the peaches come on line with the knives 12 13 the lower knife 12 will pass up between the chains 2, firmly grasping the peach, as shown in Fig. XII, and owing to the V-shaped construction of the edges of the knife the peach is held therein while being lifted up above the carrying-chain and at the same time severed, as shown in Fig. XII, the continued rotation of the shaft 30 causing the knife 12 to recede after having severed the peach and to again rise by the time the succeeding peach has come on line with the knife, the knife thus forming a holding medium for the peach after it has been raised out of its spring-holder

and held entirely by the knife until the peach and pit are severed, thus performing its operation without dragging the fruit and avoiding the crushing or bruising of the same incidental to device where the knife is drawn across the fruit.

I claim as my invention—

1. As a new article of manufacture in a peach-pitting machine, a double drive-chain having an intervening space, a bail-shaped wire for holding the peach secured to each of the drive-chains and a spring connecting the top of the bail-shaped wire with the outer portion of the drive-chain, substantially as set forth.

2. In a peach-pitting machine the combination of a double drive-chain having an intervening space, a bail-shaped wire, forming a peach-holder having its lower ends secured to the inner part of the drive-chain, a spring-wire having its upper end secured to the upper portion of the bail-shaped holder, a spring-loop formed therein and its lower end secured to the opposite side of the drive-chain, substantially as set forth.

3. In a peach-pitting machine the combination of a suitable frame, a drive-chain for carrying the peaches, holders secured to the drive-chain, a fixed severing-knife, guide-rods secured to the frame, an upper and lower block adapted to reciprocate on said guide-rods, a severing-knife attached to the upper block, and tubes placed between said blocks and rods extending through said tubes and secured to the blocks whereby the blocks are spaced apart and held in a fixed position, substantially as set forth.

4. In a peach-pitting machine the combination of a suitable frame, a peach-carrying device, holders secured to the carrying device, a knife having a section fixed to a suitable support and a reciprocating section, guide-rods secured to the frame, blocks suitably connected and working on said guide-rods, the reciprocating section of the knife being secured to the upper block, a pitman pivoted at its lower end to the lower block, an operating-shaft having a crank thereon and having the upper end of said pitman secured to the crank, substantially as set forth.

GEORGE E. GRIER.

Witnesses:

G. H. WATERS,
GRANT PITZER.