(No Model.) 6 Sheets—Sheet 1.

M. HOFHEIMER.

CARAMEL WRAPPING MACHINE.

No. 594,796. Patented Nov. 30, 1897.

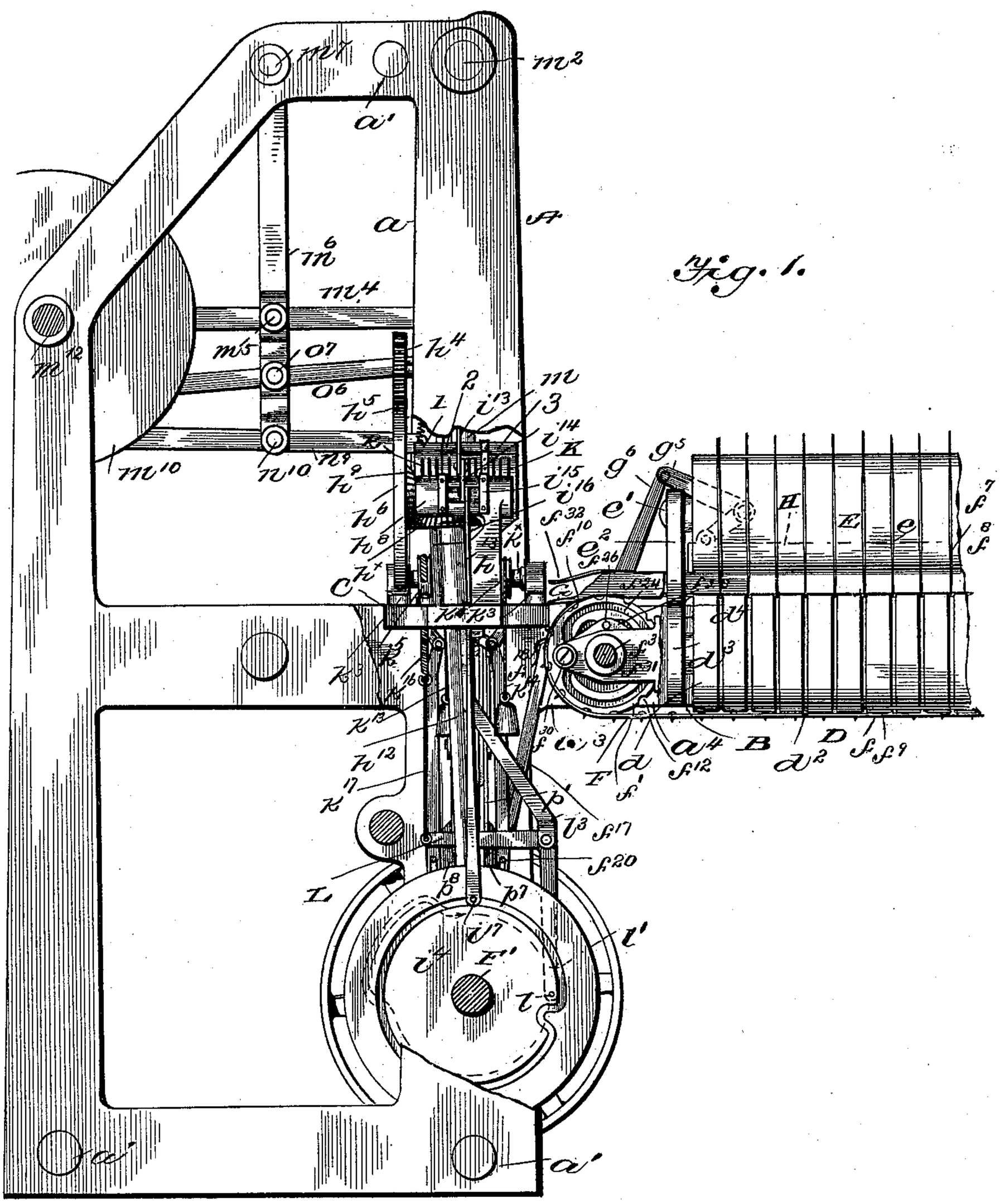

Fig. 1.

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(No Model.) 6 Sheets—Sheet 2.

M. HOFHEIMER.

CARAMEL WRAPPING MACHINE.

No. 594,796. Patented Nov. 30, 1897.

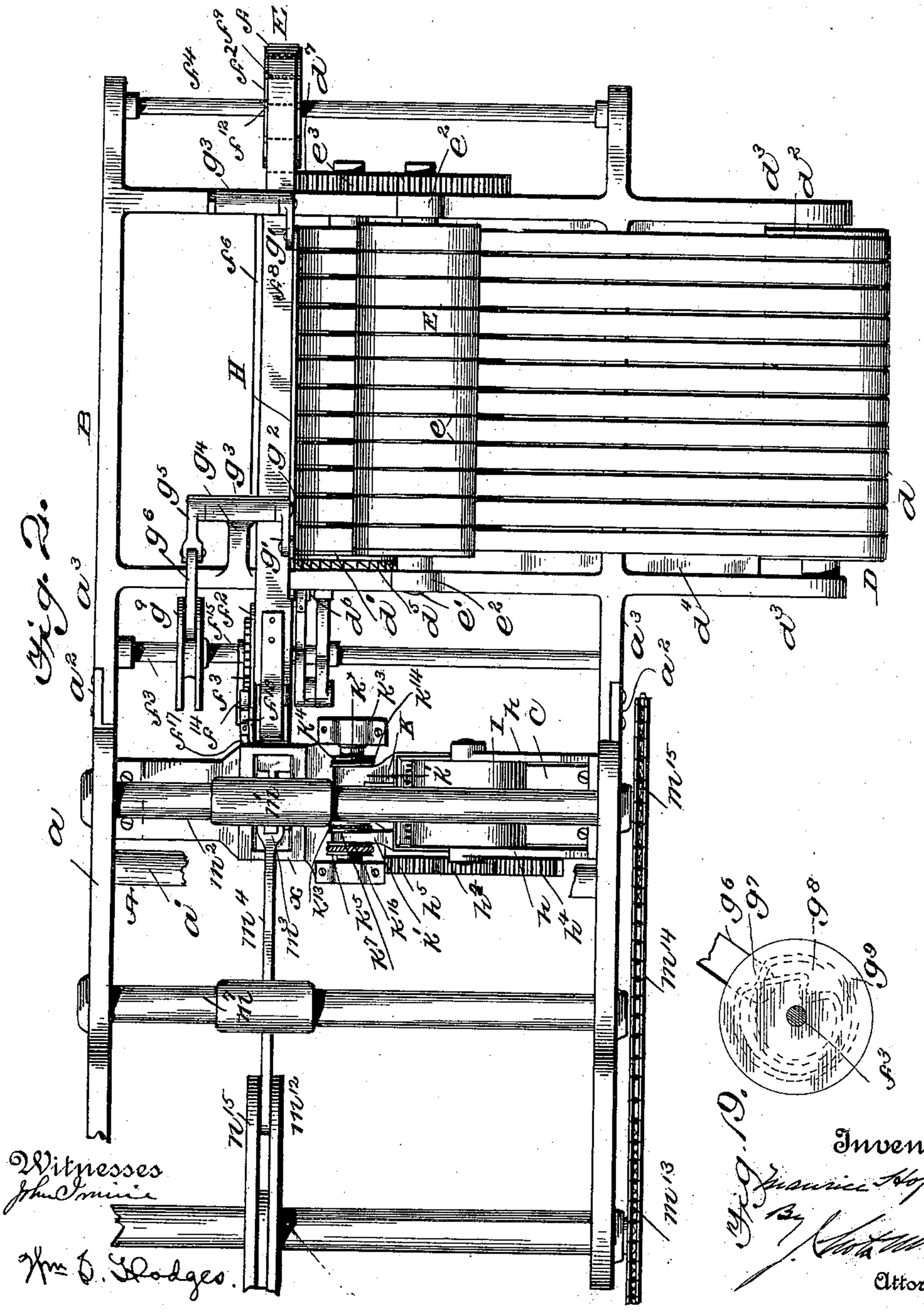

Fig. 2.

Fig. 10.

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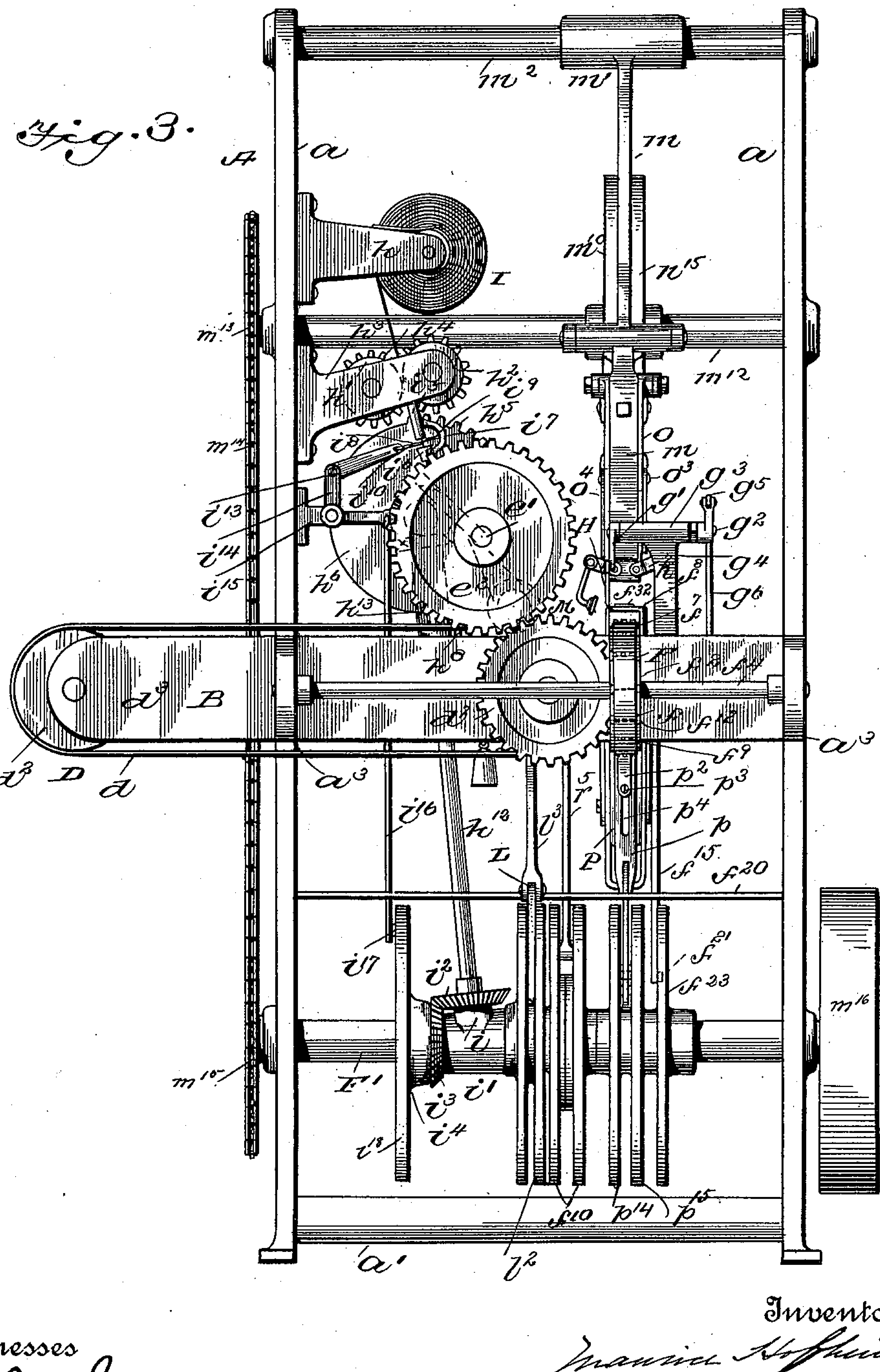
M. HOFHEIMER.

CARAMEL WRAPPING MACHINE.

No. 594,796. Patented Nov. 30, 1897.

Fig. 3.



Witnesses

[illegible]

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(No Model.) 6 Sheets—Sheet 4.

M. HOFHEIMER.

CARAMEL WRAPPING MACHINE.

No. 594,796. Patented Nov. 30, 1897.

Fig. 4.

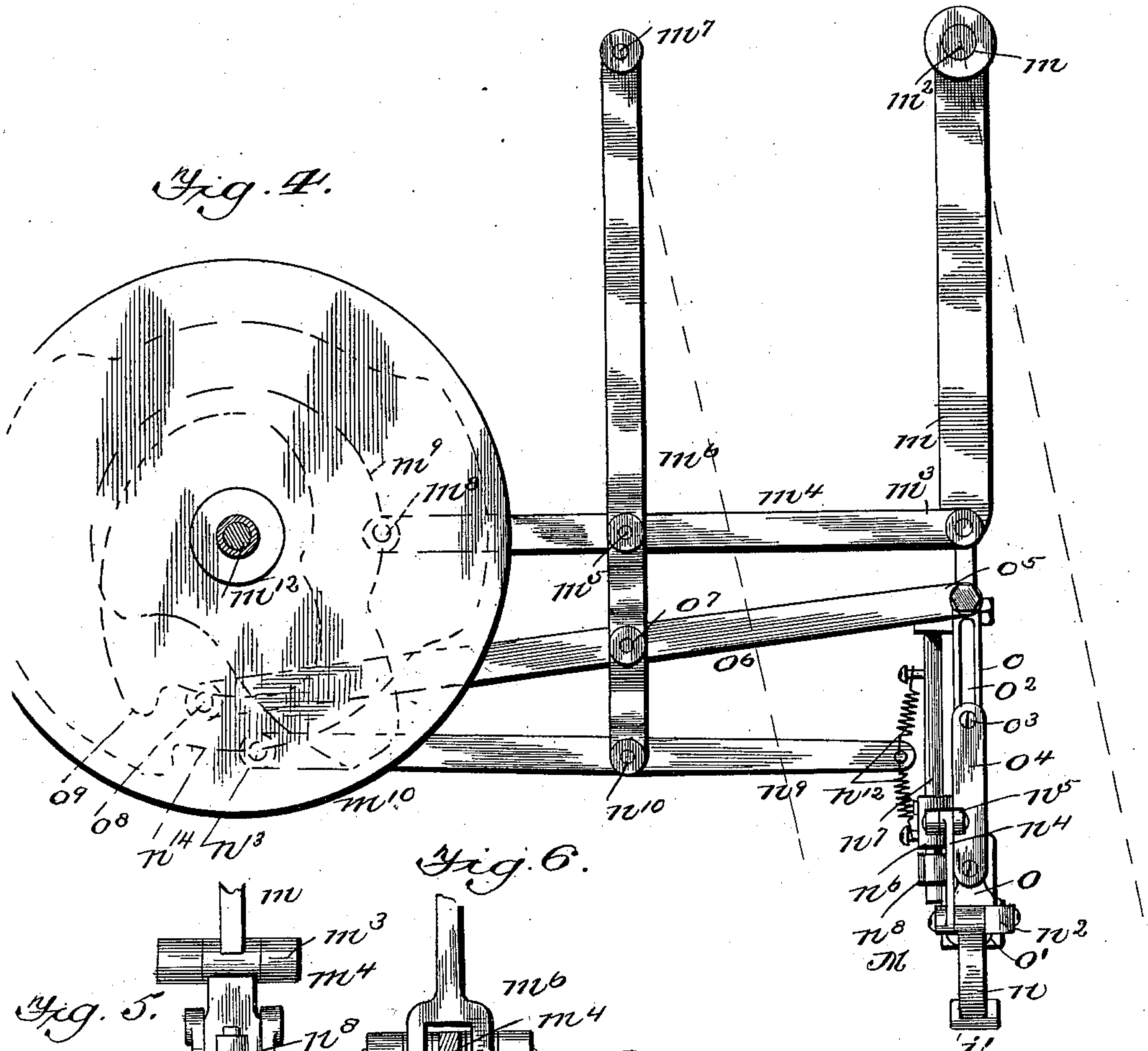


Fig. 5.

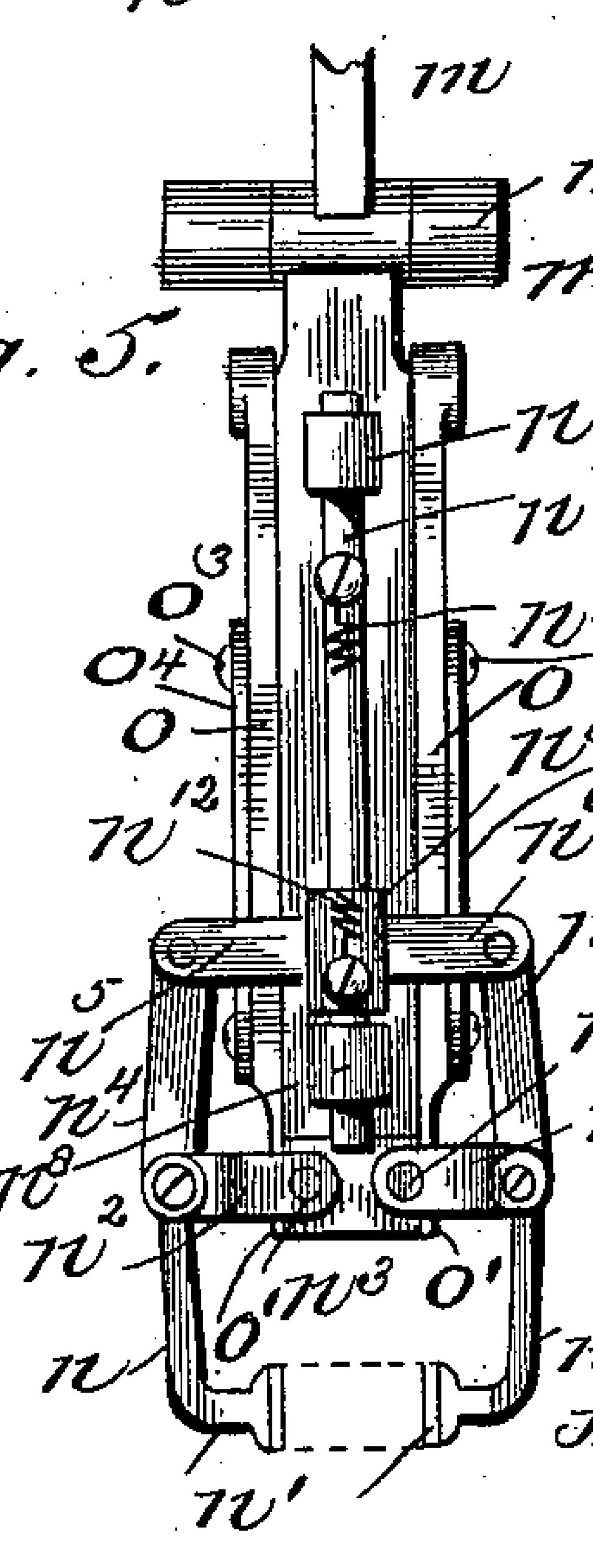


Fig. 6.

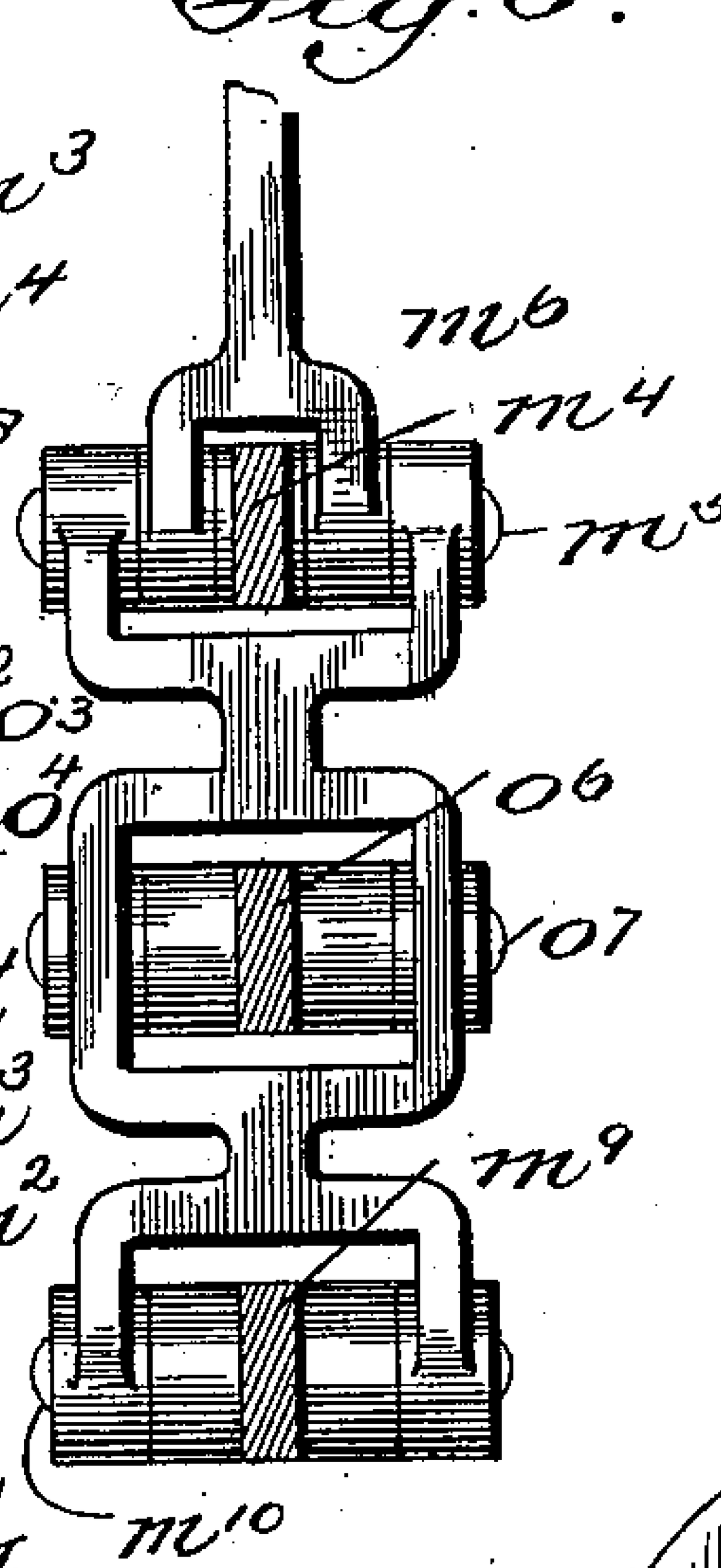


Fig. 18.

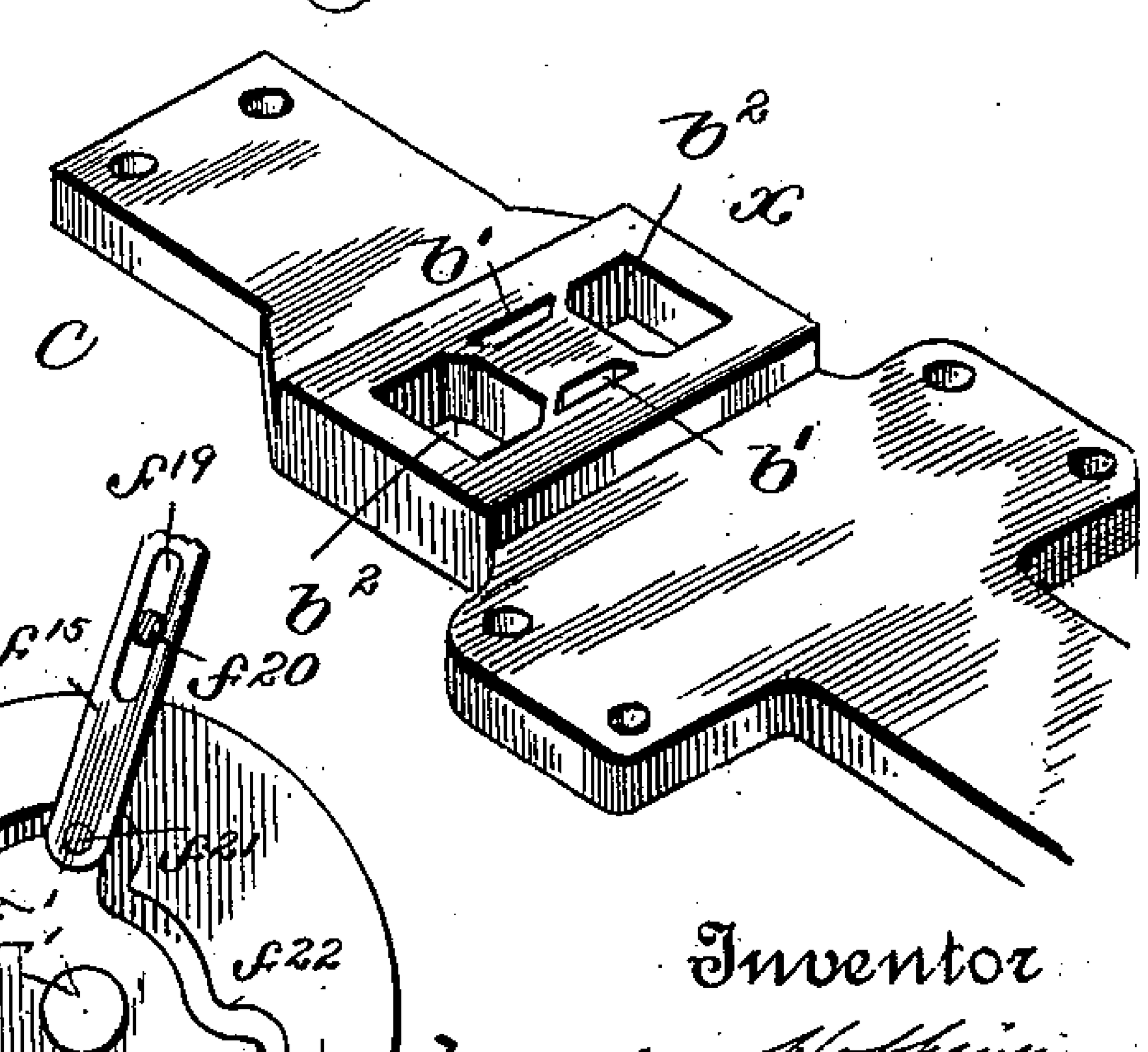
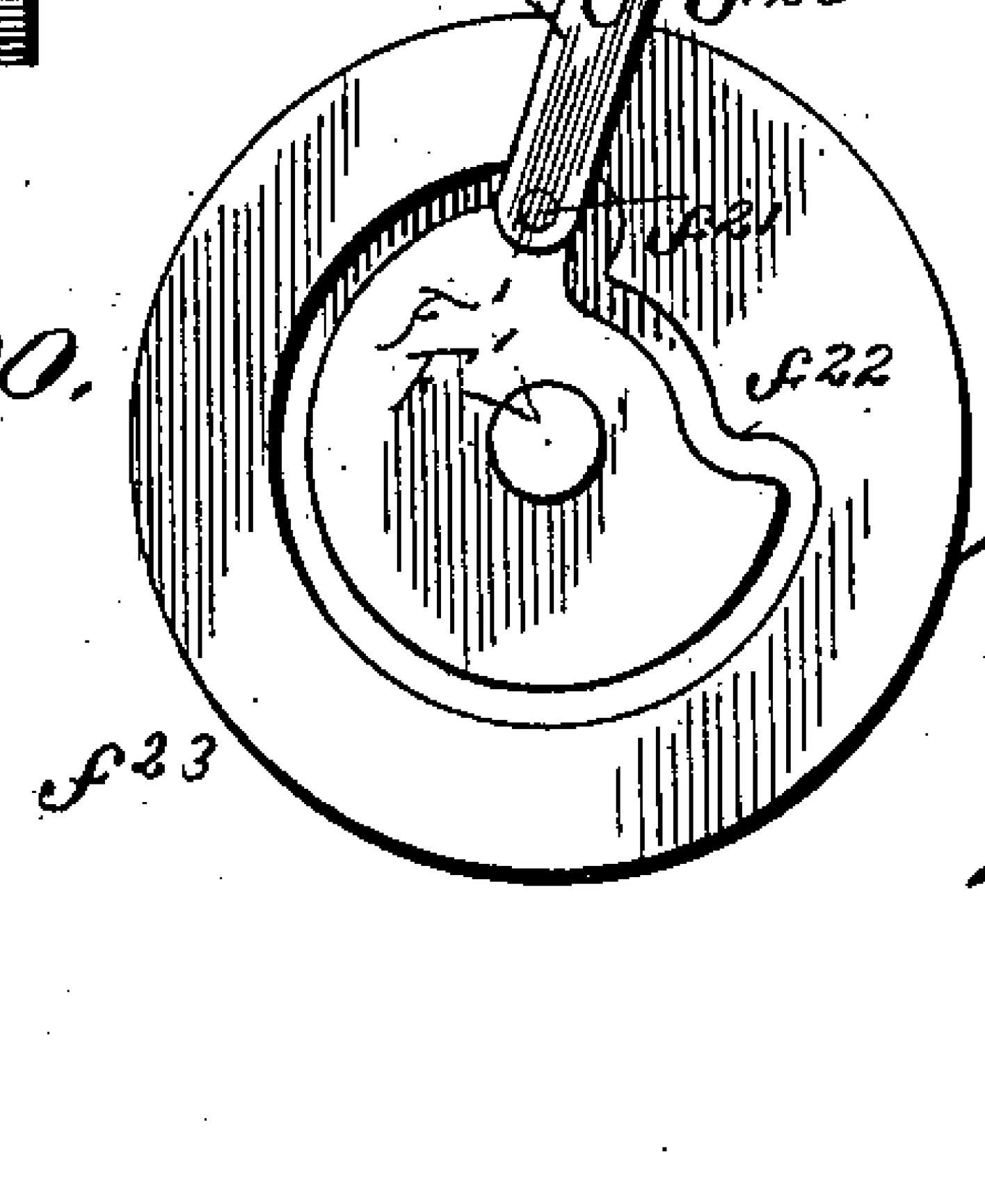


Fig. 20.



Witnesses

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(No Model.) 6 Sheets—Sheet 5.

M. HOFHEIMER.

CARAMEL WRAPPING MACHINE.

No. 594,796. Patented Nov. 30, 1897.

Fig. 7.

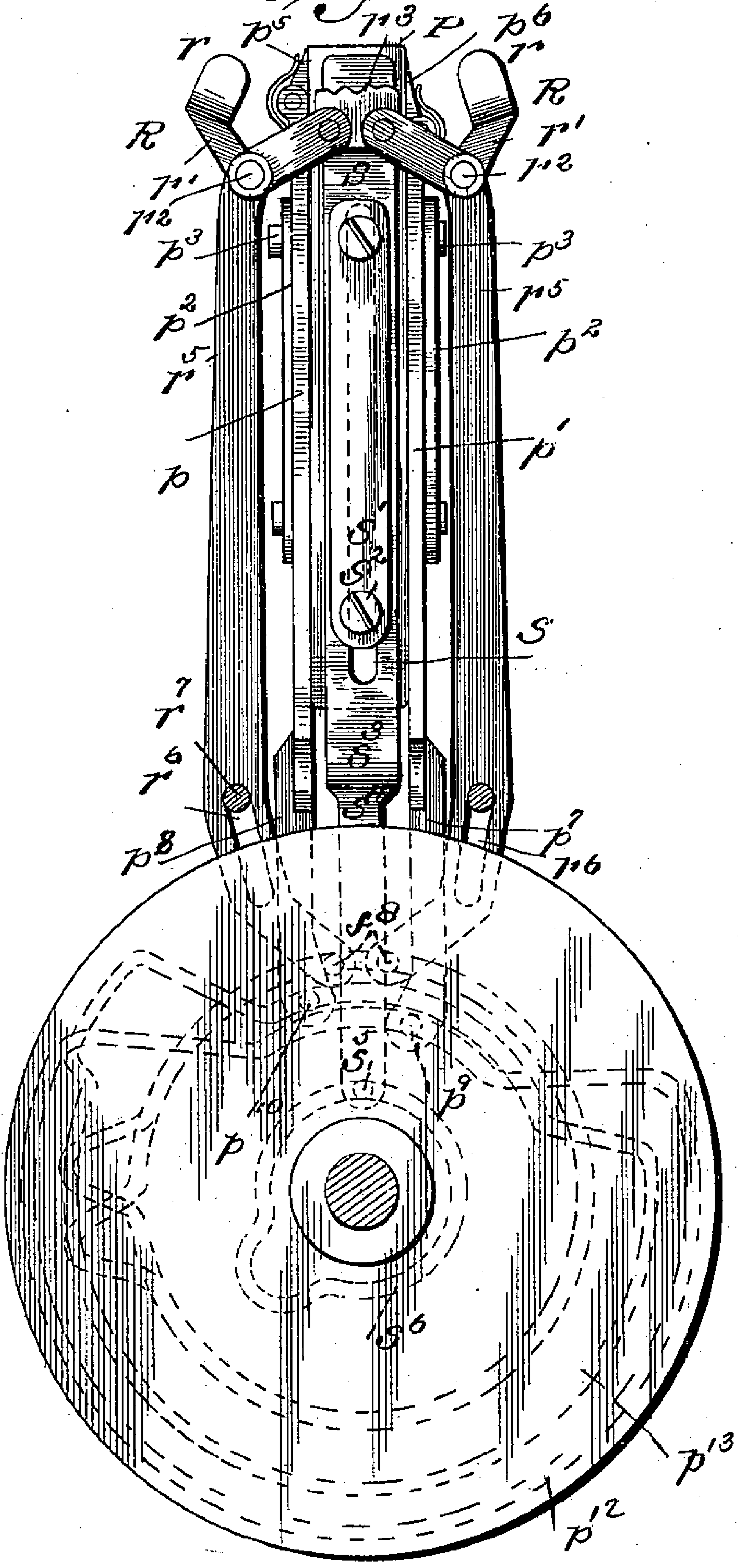


Fig. 8.

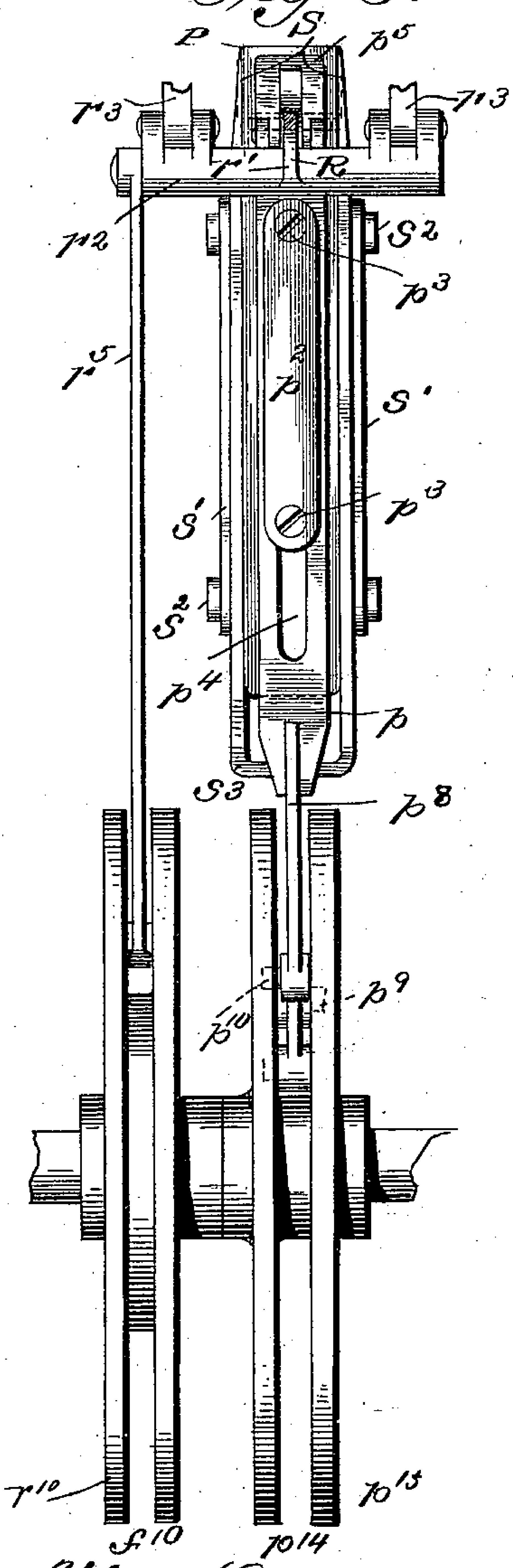


Fig. 9.

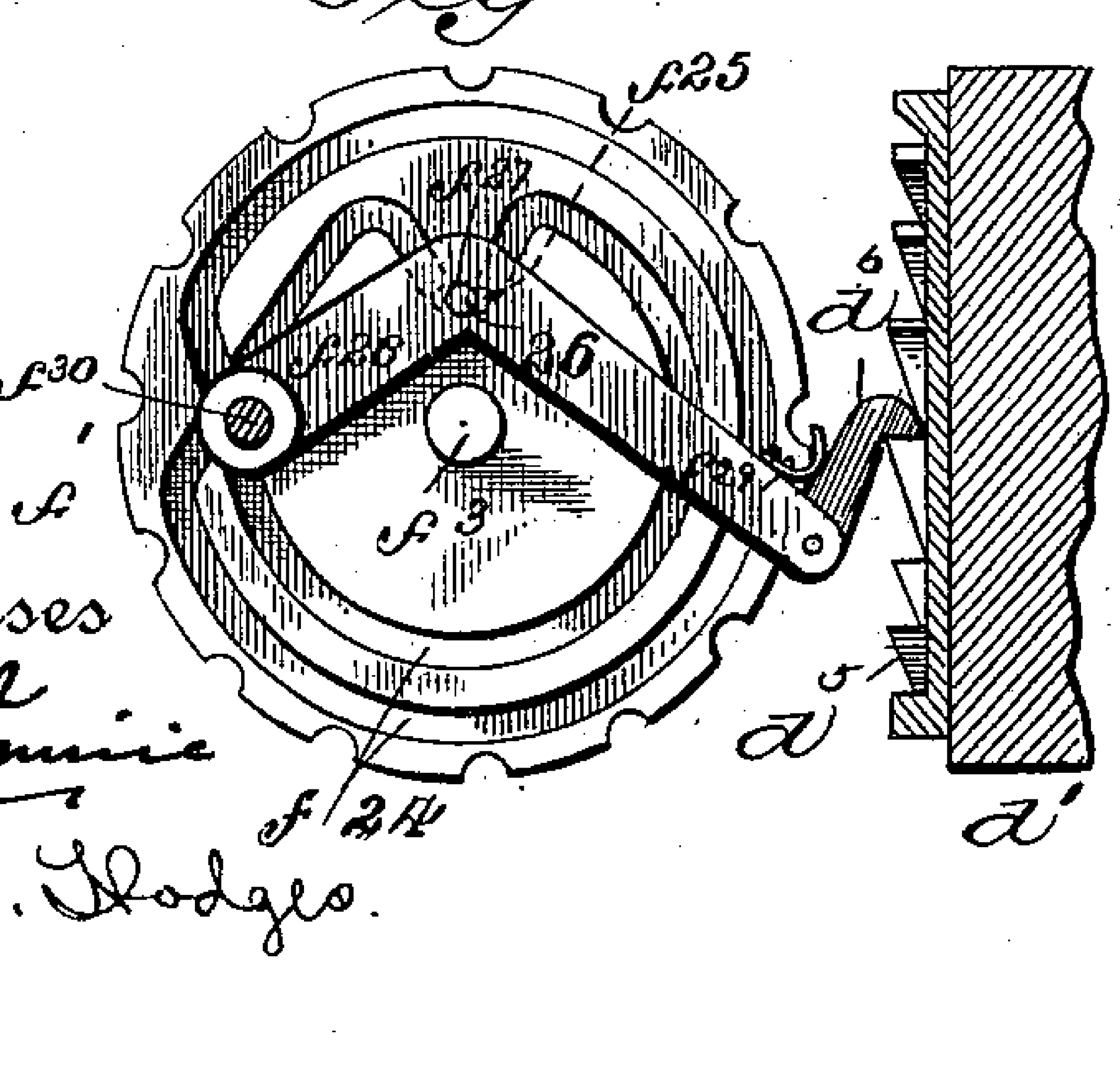
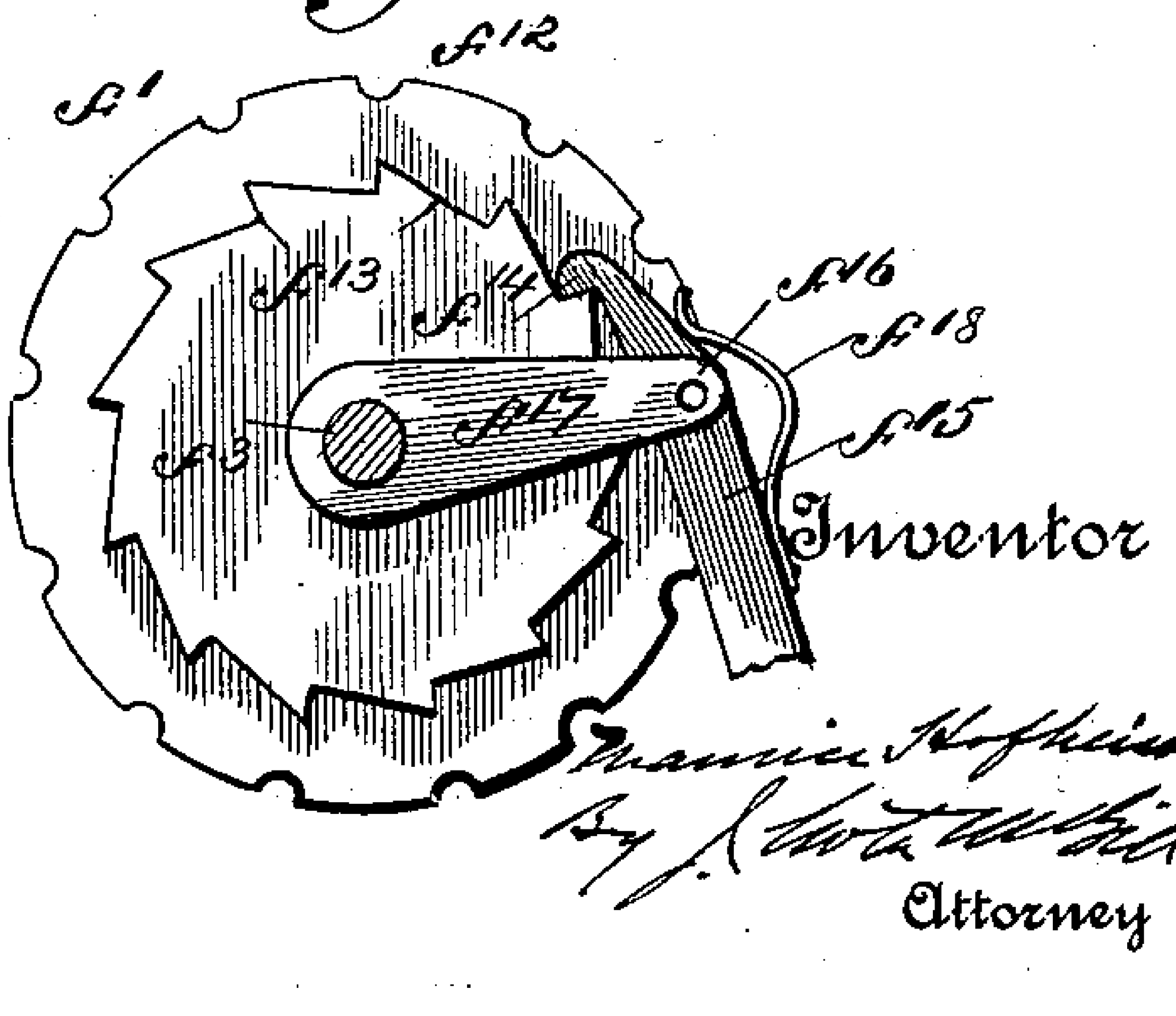


Fig. 10.



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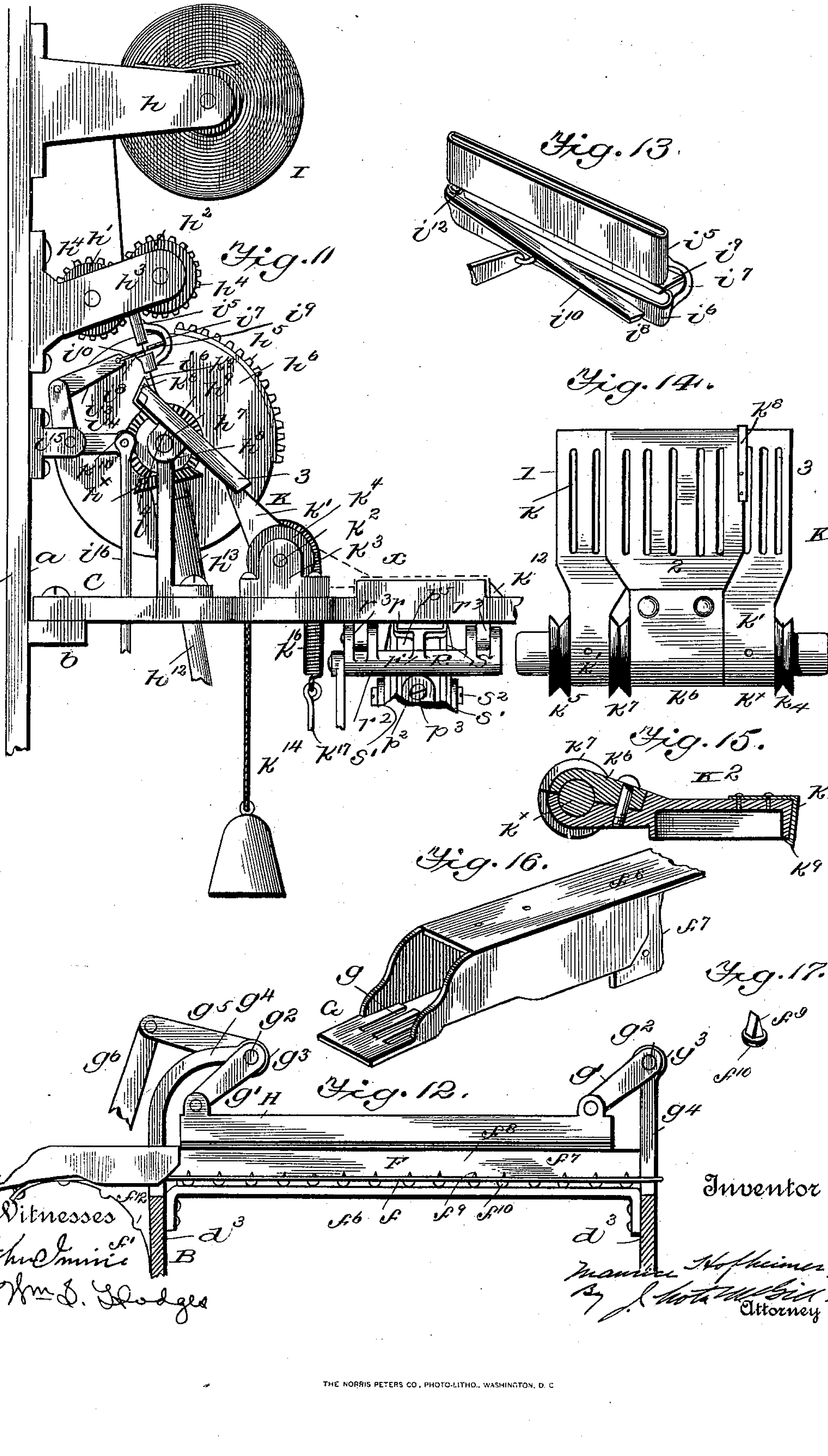
(No Model.) 6 Sheets—Sheet 6.

M. HOFHEIMER.

CARAMEL WRAPPING MACHINE.

No. 594,796. Patented Nov. 30, 1897.



Witnesses

[illegible]

[illegible]

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Maurice Hofheimer,

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MAURICE HOFHEIMER, OF BALTIMORE, MARYLAND.

CARAMEL-WRAPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 594,796, dated November 30, 1897.

Application filed May 1, 1896. Serial No. 589,920. (No model.)

To all whom it may concern:

Be it known that I, MAURICE HOFHEIMER, of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Caramel-Wrapping Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention contemplates certain new and useful improvements in wrapping-machines, and is specially designed with the view of providing a simple, inexpensive, and highly efficient machine for quickly and easily effecting the cutting, feeding, and wrapping of candy caramels.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation with parts broken away, showing my improved machine in its entirety. Fig. 2 is a top plan view thereof. Fig. 3 is a front end elevation. Fig. 4 is a side view of the carrier and holder. Fig. 5 is a rear view of a portion of the carrier. Fig. 6 is an enlarged view, partly in section, showing the hanging bar for the series of levers. Fig. 7 is a side elevation of the lower paper wrapper. Fig. 8 is an end view thereof. Fig. 9 is an end view of the roll carrying the feed-belt. Fig. 10 is a similar view of the opposite end. Fig. 11 is a view of the paper feeding and holding mechanism. Fig. 12 is a detail of the knife. Fig. 13 is an enlarged view of the paper-shears. Fig. 14 is a plan view of the carrier for the paper sections. Fig. 15 is a sectional view thereof. Fig. 16 is an enlarged perspective view of one end of the tube through which the caramels are passed before being wrapped. Fig. 17 is a detail, enlarged. Fig. 18 is an enlarged view in perspective of portions of the supporting-table. Fig. 19 is a detached view of one of the cam-wheels and lever in engagement therewith. Fig. 20 is a similar view of another cam-wheel.

Referring to the drawings, A designates the main frame, composed of two corresponding sides a, of skeleton form, united by cross brace-rods a'. The front upright portions a^2 of said sides have central extensions a^3, to which are rigidly secured the parallel bars a^4 of a supplemental frame B, which latter occupies a horizontal position and extends outwardly from frame A.

C is a table located within frame A and supported at its ends by flanges b of the sides a. This table is of irregular width, and in the slightly-raised portion x, on which the caramel is deposited to be wrapped, are two sets of openings b' b^2 at right angles to each other, the openings b' being in the form of slots and the openings b^2 substantially square or oblong.

D is the candy-cake feeder, by which the cake from which the caramels are cut is presented to the action of the cutters in the formation of long narrow strips and which then presents said strips to the action of another cutter, by which the formation of the caramels is completed. This feeder comprises a series of endless belts d, movable longitudinally on supplemental frame B and at right angles to frame A. These endless belts d are passed over drums d' d^2, whose journals are mounted in parallel bars d^3 of frame B, said belts being movable over a table d^4, supported by said bars d^3. The drum d' is provided at one end with ratchet-teeth d^5, with which engages a pawl d^6, extended through an opening in the adjoining side bar d^3, said pawl being the means for gradually rotating said drum, and hence the feed-belts d are moved forward. At the other end of the drum d' its journal is provided with a gear-wheel d^7.

E is the candy-cake cutter. It is composed of a drum having a series of spaced-apart circular cutting-disks e. The shaft e' of said drum is supported at its ends by upright arms e^2, extending from the parallel bars d^3. The journal of this drum has a gear-wheel e^3 thereon, with which engages the gear-wheel d^7 of drum d'. In this way motion is imparted from the latter drum to the series of cutting-disks.

F is the caramel-feeder, onto which the ends of the candy strips are fed. After said strips have been cut transversely, completing the formation of the caramels, the latter will be fed forward to be wrapped. This feeder comprises an endless belt f, extended at right angles to and transversely of the candy-cake feeder, said belt being passed around gradually-operated drums f' and f^2, mounted, respectively, on shafts f^3 and f^4, supported by

the inner and outer ends of bars a^4 of frame B. The upper portion of this belt travels over a narrow table f^6, supported at its ends by bars d^3, to which it is secured, and to one side of said table is secured the vertical portion f^7 of a tube f^8, the top of which extends over the table and belt thereon. This tube is open at one side near its entire length, and it serves as a guide for the caramels.

The belt f is provided with a series of spread-apart rows of teeth f^9 of comb-like form. These teeth are in the form of headed tacks, the rounded heads f^{10} of which are on the inside of the belt. To accommodate these heads, the drums f' f^2 are provided with peripheral grooves f^{12}. This forms a sprocket-like engagement between the belt and its drums, insuring the uniform movement of the former.

The drum f' on one side is provided with ratchet-teeth f^{13}, with which engages a pawl f^{14}, pivotally connected to a lever f^{15} by a screw f^{16}, which connects said lever to the outer end of an arm f^{17}, the inner end of which latter is loose on shaft f^3. The pawl is held in engagement with the ratchet-teeth by a plate-spring f^{18}, carried by said lever. Through a slot f^{19} in this lever, near its lower end, extends a cross-rod f^{20}, which serves as a guide. The lower end of the lever f^{15} has a stud f^{21}, which fits in a cam-groove f^{22} of a wheel f^{23}, fast on an operating-shaft F', mounted at its ends in sides a. The groove in this wheel is such as to operate the lever f^{15} once in each revolution, causing said lever, through the pawl f^{14}, to gradually move the drum f' to feed a caramel to a shelf G, supported by the sides of the tube, said shelf being in line with the table f^6. In the other end of this drum f' is a double groove f^{24}, (see Fig. 9,) in which fits the elongated head f^{25} of a pin f^{26}, which is extended through a short slot f^{27} of a rocking arm f^{28}, to one end of which the pawl d^6 is pivoted, said pawl being held in engagement with the ratchet-teeth d^5 by a plate-spring f^{29}. The outer end of this rocking arm f^{28} is pivoted by a screw f^{30} to the outer end of a bracket f^{31}, rigidly attached to one of the bars d^3 of frame B. Said bracket has an opening therein to accommodate and not interfere with shaft f^3. The groove f^{22} is formed in the manner shown, so as to allow the drum f' to rotate twice to one action of the drum d'. The decidedly-curved or V portion of this groove upon coming in contact with the headed end of pin f^{26} will rock arm f^{28}, causing the pawl d^6 to move drum d', and hence the series of feed-belts d, the extent of one tooth. By elongating the head of this pin the same follows in the line of the proper branch of the groove at the point of intersection of the two branches. The inner end of tube f^8 is extended over the drum f' to about the diametrical center of the latter, and to its top is secured one end of a plate-spring f^{32}, which presses slightly on the top of the caramels as the latter leave the tube and pass onto the inclined shelf G. This shelf at its inner edge almost engages the periphery of drum f'. The said edge is of comb-like form—that is, it has a series of grooves or cut-outs g to allow of the passage of the teeth carried by belt f. In this way the caramels are fed by the belt f to the shelf G, on which they remain until removed to be wrapped.

H is the vertically-movable knife for cutting the strips of candy into caramels as said strips are fed into tube f^8 and onto belt f. This knife is movable over the open side of said tube, and the upper edges of its ends are pivotally connected to the lower ends of arms g', fast at their upper ends on shafts g^2, extended through hollow bearings g^3 on the outer ends of brackets g^4, extended from bars d^3. To the outer end of one of these shafts g^2 is connected an arm g^5, to the free end of which a pitman g^6 is connected, the lower end of said pitman being provided with a stud g^7, which is held in engagement with the cam-groove g^8 of a wheel g^9, fast on shaft f^3, Fig. 19. This cam-groove is so formed as to operate the knife at the proper time to effect the cutting of the candy strips into caramels.

I designates the roll of paper, in sections of which the caramels are designed to be wrapped. This roll is supported by a bracket h, attached to one of the sides a. The paper is passed between two rolls h' h^2, whose journals are likewise supported by a bracket h^3, attached to said side frame. At one end these rolls have intermeshing gear-wheels h^4. These rolls are set at an incline, so that the gear-wheel of roll h' will be engaged by the segmental toothed portion h^5 of a wheel h^6, whose journal h^7 is mounted in a bearing or casting h^8, secured to table C. On the inner face of this wheel h^6 is a beveled pinion h^9, with which engages a similar pinion $h^\times$ on the upper end of a shaft h^{12}. This shaft is passed through a tubular portion h^{13} of casting h^8, and at its lower end is loosely supported by the tubular portion i of sleeve i', loose on the main operating-shaft F'. The shaft h^{12} being inclined, a beveled pinion i^2 on its lower end occupies an inclined position and engages a beveled pinion i^3 on a wheel i^4, fast on a shaft F'. In this way wheel h^6 is constantly rotated, but only when its toothed portion engages the gear-wheel of roll h' is the latter and the roll h^2 caused to revolve.

Located longitudinally of the two rolls and beneath the line of contact thereof is a long narrow tube i^5, through which the paper is passed. A lower section i^6 of this tube is connected by an outwardly-bowed portion i^7, leaving a narrow space between the tube and its lower section. Within this space is located a pair of shears i^8, which comprise a stationary member i^9, attached along one edge to the bowed portion i^7, and a movable member i^{10}, pivoted to said former member at the ends i^{12}. To this movable member is connected an arm i^{13} of a bell-crank lever i^{14}, fulcrumed on a bracket i^{15} and capable of being operated by a pitman i^{16}, whose lower end is

provided with a stud i^{17}, which fits in the cam-groove of wheel i^{18}. By means of these shears the paper is cut or severed in proper lengths for forming wrappers for caramels.

K is the paper-carrier, by which the sections of paper are deposited on table C at the point x, where the wrapping operation is conducted. This carrier is pivotally mounted on table C and is normally held elevated. It is composed of three parts or sections 1 2 3 of pan-like shape and provided with parallel slots or openings k of gridiron-like form. The two end sections 1 and 3 have extensions k', which are formed with or rigidly secured to a shaft $k^{\times}$, the reduced ends k^2 of which latter are supported by bearings k^3, mounted on the widened portions of table C. On said shaft, adjacent the extensions of said sections, are grooved wheels k^4 and k^5. The section 2 of the carrier has its extension k^6 in the form of a split socket, so as to be easily secured on shaft $k^{\times}$, on which it is free to turn. To one side of this extension is secured a split grooved wheel k^7. To the forward end of this central section 2 is secured a spring-catch k^8, the hooked end k^9 of which is designed to normally engage the flanged edge k^{10} of section 3, so that as the end sections are lowered down onto table C the section 2 will travel with them; but as soon as said sections reach said table the catch will be disengaged from said section 3 by reason of contact with a wedge-like projection k^{12} on the upper surface of the table. This permits the section 2 to fly back out of the way under the action of a weighted cord k^{13}, secured to the grooved wheel k^7, the remaining section serving to hold the paper in position on the table while the caramel is being moved thereonto. To the wheel k^4 is secured a weighted cord k^{14}, while to the wheel k^5 is connected one end of a coil-spring k^{16}, the other end thereof being connected by a rod k^{17} to the free end of one arm of a lever L, the free end of the other arm of said lever being provided with a stud l, which fits in a cam-groove l' of a wheel l^2 on shaft F'. The lever L is fulcrumed at the junction of its two arms on a standard l^3, depending from table C. The sections of the carrier when in their normal position rest against the flattened surface l^4 of casting h^8. When in this position, the section of paper cut by the shears will fall onto the pan-like face of the carrier, and the cam-groove of wheel l^2, acting on lever L, will, through the agency of spring k^{16}, draw the carrier down over that portion of table C provided with the openings b' and b^2. Instantly the central section 2 is released and returns to its normal retracted position, and by the time the caramel is positioned at x the cam-groove l', acting on lever L, releases the tension on spring k^{16}, allowing the two end sections 1 and 3 to fly back under the action of the weighted cord k^{14}.

M designates the carrier and holder for the caramels, by which the caramels are picked from the shelf G and deposited on the table C and held during portions of the wrapping operation and by which the wrapped caramel is removed from the table. It comprises a depending swinging bar m, having a socket m' at its upper end which fits on a shaft m^2, supported by the vertical sides of the frame A. To about the center of this bar m is pivotally connected the forward forked end m^3 of a lever m^4, fulcrumed at m^5 on a hanging bar m^6, suspended from a cross-rod m^7 of frame A. The rear end of this lever has a stud m^8, which fits in a cam-groove m^9 of a wheel m^{10}, fast on a rear shaft m^{12}, supported by said frame, one end of said shaft having a sprocket-wheel m^{13} thereon, with which engages a chain m^{14}. This chain also engages a sprocket-wheel m^{15}, fast on one end of operating-shaft F'. A main driving-pulley m^{16} is on the other end of said shaft. $n\,n$ are two clamping-levers having lower inwardly-extended ends n', which are flattened, so as to fit snug against opposite sides of the caramel, said lever having bowed or U-shaped plates n^2 extending therefrom and fulcrumed at n^3 to the lower end of bar m. The upper arms n^4 of these levers are pivotally connected to the outer ends of horizontal arms n^5, extending laterally from a collar n^6, fast on a rod n^7, movable vertically in bearings n^8, extending rearwardly from bar m. A lever n^9, fulcrumed at n^{10} in the lower end of hanger m^6, is connected at its forward end to rod n^7 and sleeve n^6 by upper and lower coil-springs n^{12}. These springs serve to prevent any jar and allow the clamping-levers to close easily against the caramel without mashing the latter. The rear end of lever n^9 is provided with a stud n^{13}, which fits in a cam-groove n^{14} of a wheel n^{15}, fast on shaft m^{12} and adjacent and fast at its hub to wheel m^{10}. Also mounted on this bar M on the same sides as the clamping-levers are two sliding folders $o\,o$, which consist of flat plates having lower reduced ends o' and longitudinal slots o^2, through which guide-screws o^3 of keeper-plates o^4 project. To the upper ends of these flat plates is connected the forked end o^5 of a lever o^6, fulcrumed at o^7 on hanger m^6, the rear end of said lever having a stud o^8, which fits in a cam-groove o^9 of wheel n^{15}, said latter cam-groove being within and hence not interfering with the cam-groove n^{14} of said wheel.

Extending from the under side of table C, in line with and corresponding to the space x between the series of openings $b'\,b^2$, is a depending post P, upon which are mounted the remainder and majority of the paper-folders. For the sake of perspicuity I will describe each set of folders in the order of their operation. Secured to the front and rear faces of post P are two sliding plates $p\,p'$, held by keeper-plates p^2 and screws p^3, passed through longitudinal slots p^4. To the upper ends of these sliding plates are pivoted fingers $p^5\,p^6$, the former being shorter than the latter. Plate-springs attached to plates $p\,p'$ bear at their free ends against these fin-

gers. From the lower ends of these sliding plates extend arms p^7 p^8, having studs p^9 p^{10} in their lower ends, which fit in cam-grooves p^{12} p^{13} of two wheels p^{14} p^{15}, mounted fast on shaft F′. These cam-grooves serve to elevate the plates p p', one following the other, immediately after a caramel is positioned on the paper on table C, and they, passing through openings b^2, raise said paper against opposite sides of the caramel, and by reason of the spring-pressed fingers the paper is folded down, so as to overlap on the top of the caramel. The cam-grooves p^{12} p^{13} do not exactly correspond, since it is necessary, first, to move the folder p in advance of the folder p', and the latter has to be moved a little greater distance than the folder p, and, secondly, the folder p is soon partly lowered, so as to remove the pivoted finger thereof from the top of the caramel, allowing the finger p^6 to remain holding the paper. Hence one end of the paper is folded down over the other. At this point in the operation the clamping-levers of the caramel-carrier are withdrawn and the paper is folded against the sides vacated by said clamping-lever by means of two folders R R′, each of which is of fork or U shape, so that the ends r, upon being projected through openings b^2, will hug or extend over two sides of the caramel at once. The connecting portions r' of each fork are connected to a rod r^2, supported at its ends by lugs r^3, depending from table C. To one end of each of these rods r^2 is connected the upper end of a long arm r^5. These arms r^5 are provided with slots r^6, through which guide-rods r^7 extend, and the lower ends of said arms have studs r^8, which fit in cam-grooves r^9 of two adjacent wheels r^{10}, fast on shaft F′. This being accomplished and the forked folders partly removed, but still engaging the ends of the caramel, the bottom ends of the paper are then folded up by flat folders S, which move through openings b^2. These folders consist of plates having slots s and held to opposite sides of post P by keeper-plates s' and screws s^2, the lower ends of said plates being extended inward at s^3 and connected to a single depending arm s^4, extended down between wheels p^{14} and p^{15}, said arm being provided with a stud s^5, which fits in a cam-groove s^6 of wheel p^{14}. This cam-groove is near the hub of the wheel and within the circumference of the other groove in said wheel. The completion of the folding operation is effected by folding down the top ends of the paper. This is accomplished by the two folders o o', carried by the swinging bar m. As these top folders and the forked folders R R′ are withdrawn the clamping-levers are again brought into contact with the caramel and the first-operated folders p p' are entirely withdrawn. The swinging bar M is then drawn rearward by the lever m^4, and the clamping-levers being operated the wrapped caramel is dropped into any suitable receptacle (not shown) located at any convenient point.

From what has been said the operation of the machine is apparent; but it may be briefly restated as follows: The candy cake is placed on the feeder D and by the turning of the drums of the latter is fed forward and subjected to the action of the series of rotary cutters. The strips of candy being extended across the caramel-feeder are cut transversely by the lowering of the knife, and one caramel at a time is then fed onto the shelf G, from which it is carried by the clamping-levers of the swinging bar and deposited on the sheet of paper on the table C. This paper is first positioned by the paper-carrier and is held at the ends by said carrier while the caramel is being placed thereon, after which the paper-carrier is entirely removed. At this point the opposite folders having spring-pressed fingers are raised and the ends of the paper caused to overlap on the top of the caramel, the paper being held by one of said fingers during the remainder of the wrapping operation. Thereupon the clamping-levers are removed and the ends of the paper are folded in from opposite sides by the fork-shaped folders. This being accomplished the paper is then folded first from the bottom and then from the top, after which the clamping-levers again engage the caramel, which is moved rearward by the swinging bar and dropped by the opening of the clamping-levers.

It is obvious that changes may be made in the details of construction without departing from the scope of my invention, and that, if desired, a carrier may be used for conveying away the wrapped caramels.

While I have spoken of the several operating-wheels as having studs fitting the grooves of the cam-wheels, in practice said studs have small rollers mounted thereon to prevent friction.

I claim as my invention—

1. In a caramel-wrapping machine, a feeder for the candy cake, means for cutting said cake into strips, a second feeder movable transversely to said former feeder, and a knife for cutting said strips transversely after they engage said second feeder, substantially as set forth.

2. In a caramel-wrapping machine, a feeder for the candy cake, means for cutting said cake into strips, a second feeder movable transversely to said former feeder and comprising an endless belt with spaced-apart projections, and a knife for cutting said strips transversely after they engage said belt between said projections, substantially as set forth.

3. In a caramel-wrapping machine, the caramel-feeder comprising an endless belt, drums therefor having grooves in their peripheries, and spaced-apart projections extended through said belt and having their inner ends designed to fit in said grooves of said drums, substantially as set forth.

4. In a caramel-wrapping machine, the caramel-feeder, comprising an endless belt, a ta-

ble over which said belt travels, and a tube open at one side and extending over said belt, in combination with a feeder for feeding the candy strips into said tube over said belt, substantially as set forth.

5. In a caramel-wrapping machine, the caramel-feeder, comprising an endless belt, drums therefor, a tube open at one side and extending over said belt, a shelf adjacent to one of said drums, and a spring-plate attached to the top of said tube and designed to engage a caramel as it passes to said shelf, substantially as set forth.

6. In a caramel-wrapping machine, the combination with the candy-cake feeder, of the caramel-feeder, comprising an endless belt, and drums therefor, means for gradually operating said drums, and means operated by one of said latter drums for periodically operating said candy-cake feeder, substantially as set forth.

7. In a caramel-wrapping machine, the combination with the candy-cake feeder, comprising an endless feeder and drums therefor, of the caramel-feeder, comprising an endless belt, and drums therefor, one of said latter drums being gradually operated, and mechanism operated by said latter drums and engaging one of the drums of said candy-cake feeder, substantially as set forth.

8. The combination with the candy-cake feeder having endless belts and drums therefor, one of said drums having ratchet-teeth at one end, of the caramel-feeder comprising a belt movable transversely to said former belts, drums therefor, means engaging one of said drums for operating said belt, said drum having a cam-groove therein, a pawl engaging said ratchet-teeth, and a lever to which said pawl is connected having its fulcrum-pin fitting in said cam-groove, substantially as set forth.

9. The combination with the candy-cake feeder, and means for cutting said candy cake into strips, of the caramel-feeder at right angles to said former feeder, a tube open at one side extending over said caramel-feeder, and a vertically-movable knife movable over the open side of said tube, substantially as set forth.

10. In a caramel-wrapping machine, the combination with intermittently-operated feed-rolls between which the paper of a roll thereof is passed, of a guide for the paper adjacent to said feed-rolls formed in two sections, a connection for uniting said sections, intermittently-operated shears located between said sections, one member of said shears being secured to said connection, and a carrier for the cut paper normally beneath said shears and guide, substantially as set forth.

11. In a caramel-wrapping machine, the combination with intermittently-operated feed-rolls between which the paper of a roll thereof is passed, of a hollow guide through which the paper is passed from said roll, said guide being formed in two spaced-apart sections, a bowed portion connecting said sections, shears located between said sections, one member being secured to said bowed portion, the other member being pivoted to the stationary member, means for intermittently operating said pivoted member, and a carrier normally adjacent to the lower section of said guide designed to receive said paper after being cut, substantially as set forth.

12. In a caramel-wrapping machine, the combination with feed-rolls having intermeshing gear-wheels, of a wheel having a segmental-toothed portion engaging one of said gear-wheels, and provided with a bevel-pinion, a casting supporting the axle of said wheel, a shaft also supported by said casting having a beveled pinion engaging said former pinion, and a second pinion on its lower end, the main operating-shaft having a bevel-pinion with which engages said latter pinion, and a bearing for the lower end of said shaft on said main operating-shaft, substantially as set forth.

13. The combination with the paper-feed, of the pivoted sectional carrier designed to receive the paper-sections, and means for lowering said carrier and returning the sections thereof, the central one of said sections being returned independently of the others, substantially as set forth.

14. The combination with the paper-feed, of the pivoted carrier formed in sections, means for lowering said carrier, and means for independently retracting the sections thereof, as set forth.

15. The combination with the paper-feed, of the pivoted carrier formed in three sections, the central one of said sections being engaged by one of the other sections, means for lowering all of said sections simultaneously, and means for releasing said central section in advance of the others, and means for retracting all of said sections, substantially as set forth.

16. The combination with the paper-feed, and the table, of the paper-carrier pivotally mounted on said table and having corresponding end sections, and a central section, a lever having flexible connection with said end sections, an operating-wheel engaging said lever, a weighted cord for said end sections, said central section having a spring-catch and a weighted cord, and a projection on said table for releasing said catch, substantially as and for the purpose set forth.

17. The combination with the paper-feed, and the table, of the paper-carrier comprising three sections of pan-like form having extensions, a shaft to which the extensions of the two end sections are rigidly secured, the central section being loosely secured on said shaft, bearings for said shaft on said table, a catch carried by said central section engaging one of said end sections, a projection on said table for releasing said catch,

weighted cords connected to said shaft and to said central section, the lever having a spring connection to one of said end sections, and the operating-wheel engaging said lever, substantially as set forth.

18. In a caramel-wrapping machine, a swinging carrier for the caramels having clamping-levers for holding a caramel, a lever for operating the same, and yielding connections for said lever, substantially as set forth.

19. In a caramel-wrapping machine, a swinging carrier for the caramels, comprising a depending bar, clamping-levers mounted on said bar having lower angular ends, a sliding rod to which said clamping-levers are connected, an operating-lever and a spring connection between said lever and said rod, substantially as set forth.

20. In a caramel-wrapping machine, a swinging carrier for the caramels, comprising a depending bar, clamping-levers mounted on said bar having lower angular ends, a rod loosely mounted on said bar, a collar on said rod, an operating-lever and upper and lower springs connecting one end of said lever to said rod and also to said collar, substantially as set forth.

21. In a caramel-wrapping machine, the combination with the caramel-feeder, of a swinging carrier having clamping-levers for holding a caramel, means for operating said clamping-levers, means for reclosing the same after the caramel is wrapped, and means for moving said carrier and again opening said clamping-levers, substantially as set forth.

22. In a caramel-wrapping machine, the combination with a caramel-feeder, of a swinging carrier, comprising a bar, clamping-levers on the lower end thereof, a hanger-bar, two levers fulcrumed on said hanger-bar, one being connected to said bar and the other to said clamping-levers, and operating-wheels with which said levers engage, substantially as set forth.

23. The caramel carrier and holder pivotally suspended and having folder-plates attached thereto, and means for lowering said folder-plates, substantially as set forth.

24. The caramel carrier and holder comprising a depending bar, vertically-movable folder-plates attached to the sides of said bar, a lever connected to said folder-plates, and means for operating said lever, substantially as set forth.

25. The combination with the depending bar, of the vertically-movable folder-plates attached to opposite sides of said bar, a hanger-bar, a lever fulcrumed on said hanger-bar and having a forked end connected to said folder-plates, and an operating-wheel engaging the other end of said lever, substantially as set forth.

26. In a caramel-wrapping machine having a table for supporting a caramel while being wrapped, provided with angularly-arranged openings, a post depending from said table, two vertically-movable folders mounted on said post and having upper spring-pressed fingers, and means for operating said folders, substantially as set forth.

27. In a caramel-wrapping machine having a table for supporting a caramel while being wrapped, provided with angularly-arranged openings, a post depending from said table, two vertically-movable folders mounted on said post and having at their upper ends spring-pressed fingers of different lengths, and means for raising said folders simultaneously and partly retracting one of them in advance of the other, substantially as and for the purpose set forth.

28. In a caramel-wrapping machine having a table for supporting a caramel while being wrapped, provided with angularly-arranged openings, a post depending from said table, two vertically-movable folders comprising plates mounted on said post and having spring-pressed fingers pivoted to their upper ends, arms extending from the lower ends of said plates having studs, and operating-wheels having cam-grooves in which said studs fit, substantially as set forth.

29. In a caramel-wrapping machine having a table for supporting a caramel while being wrapped, provided with angularly-arranged openings, a post depending from said table, two pivoted fork-shaped folders, and means for operating said folders, one in advance of the other, substantially as set forth.

30. In a caramel-wrapping machine having a table for supporting a caramel while being wrapped, provided with angularly-arranged openings, a post depending from said table, two folders of fork shape, two pivotally-mounted rods to which said folders are connected, depending arms connected to said rods, and operating-wheels for raising and lowering said arms, substantially as set forth.

31. In a caramel-wrapping machine having a table for supporting a caramel while being wrapped, provided with angularly-arranged openings, a post depending from said table, two folders of fork shape, two rods to which said folders are connected, lugs depending from said table and supporting said rods, depending arms connected to said rods and having studs in their lower ends, and operating-wheels having cam-grooves for said studs, substantially as set forth.

32. In a caramel-wrapping machine having a table for supporting a caramel while being wrapped, provided with angularly-arranged openings, a post depending from said table, two folders consisting of flat plates mounted on said post and connected together at their lower ends, an arm depending therefrom, and a wheel for operating said arm and folders, substantially as set forth.

33. A caramel-wrapping machine having a table provided with a series of openings and a depending post, a swinging carrier and

holder for the caramels above said table, a series of folders mounted on said post, means for operating said folders in their order, and folders carried by said carrier and holder and designed to be operated subsequent to said folders on said post, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

MAURICE HOFHEIMER.

Witnesses:
CHAS. H. MILES,
JAS. L. MURRILL.