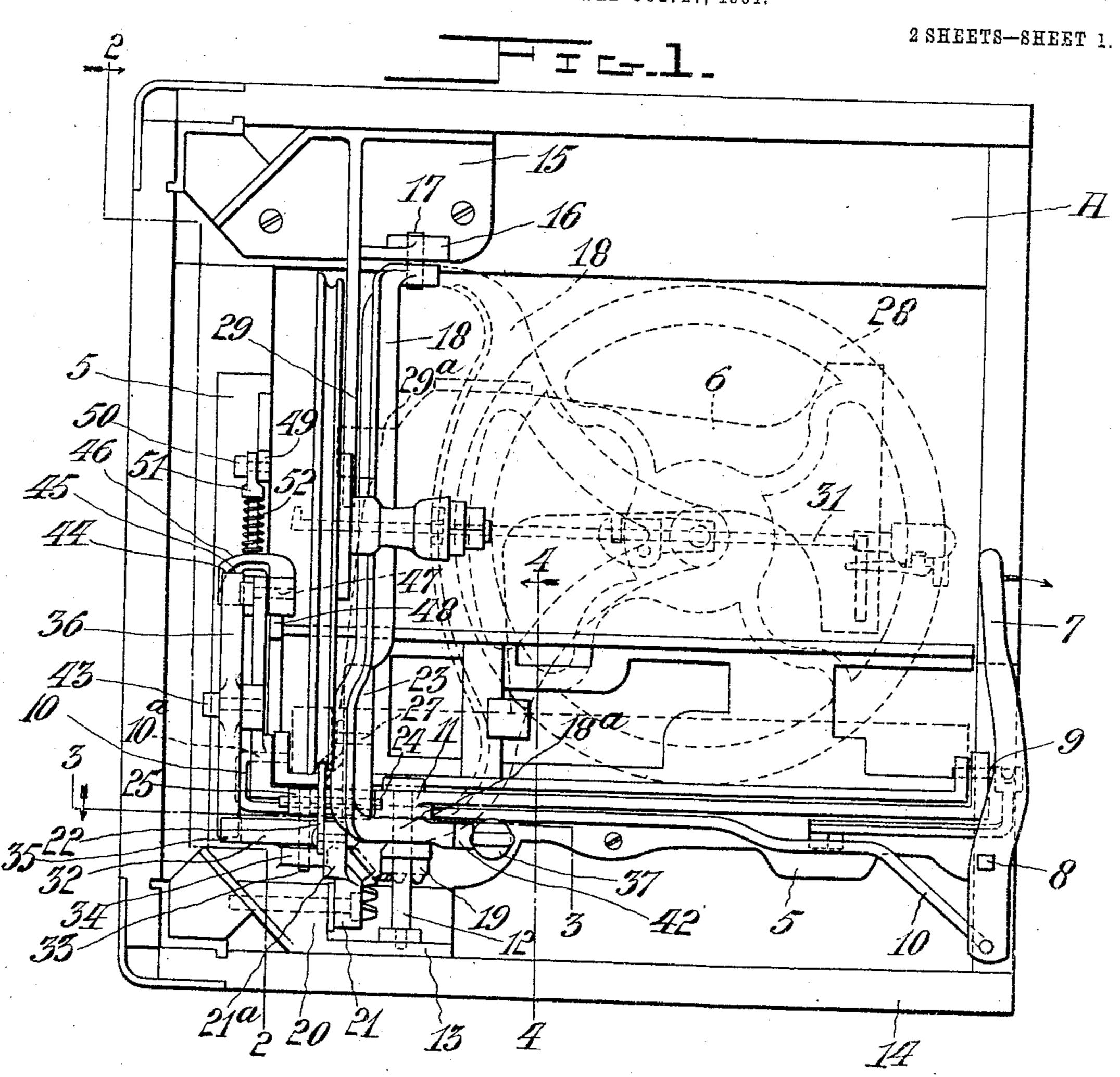
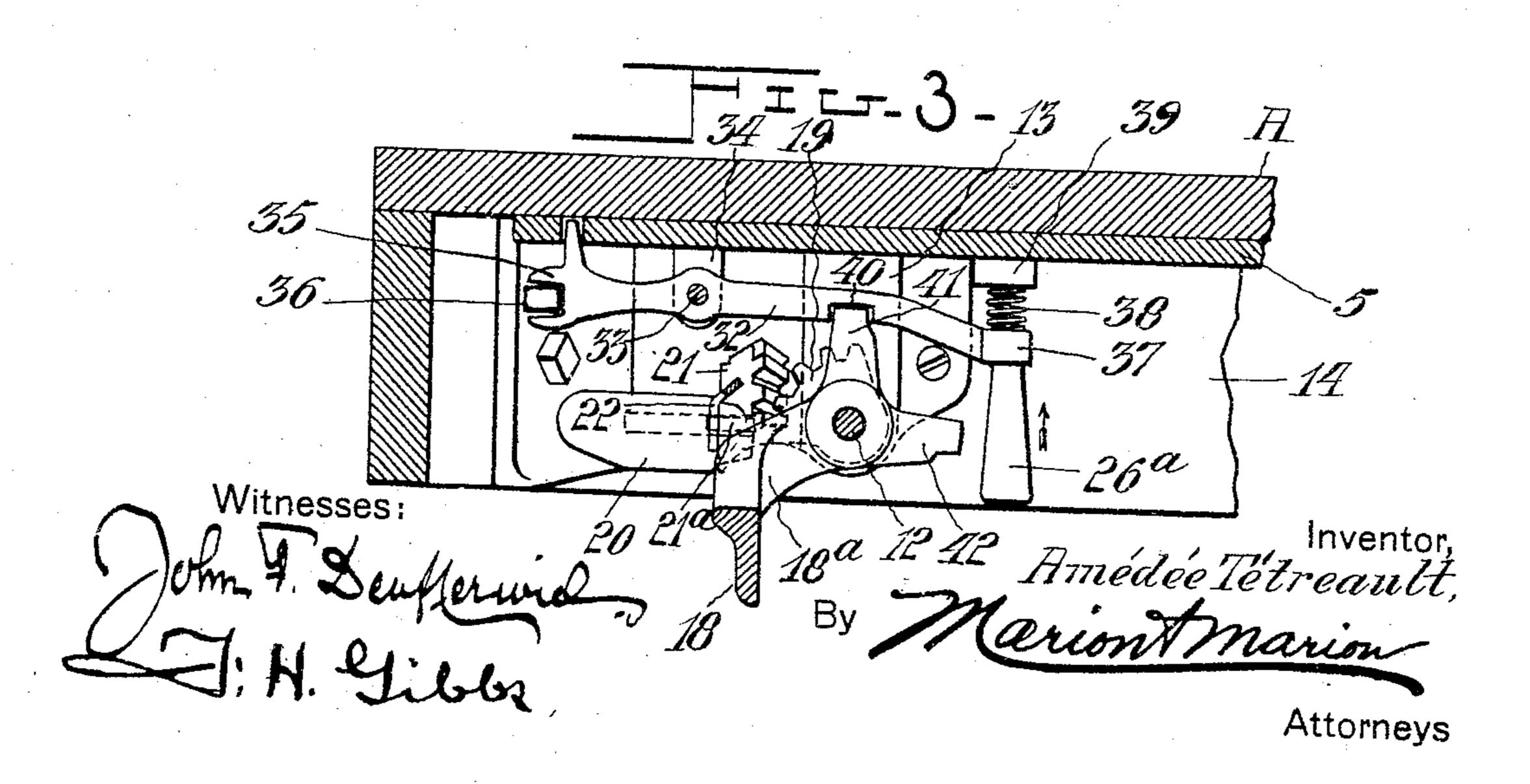
A. TÉTREAULT. SEWING MACHINE.

APPLICATION FILED OCT. 27, 1904.

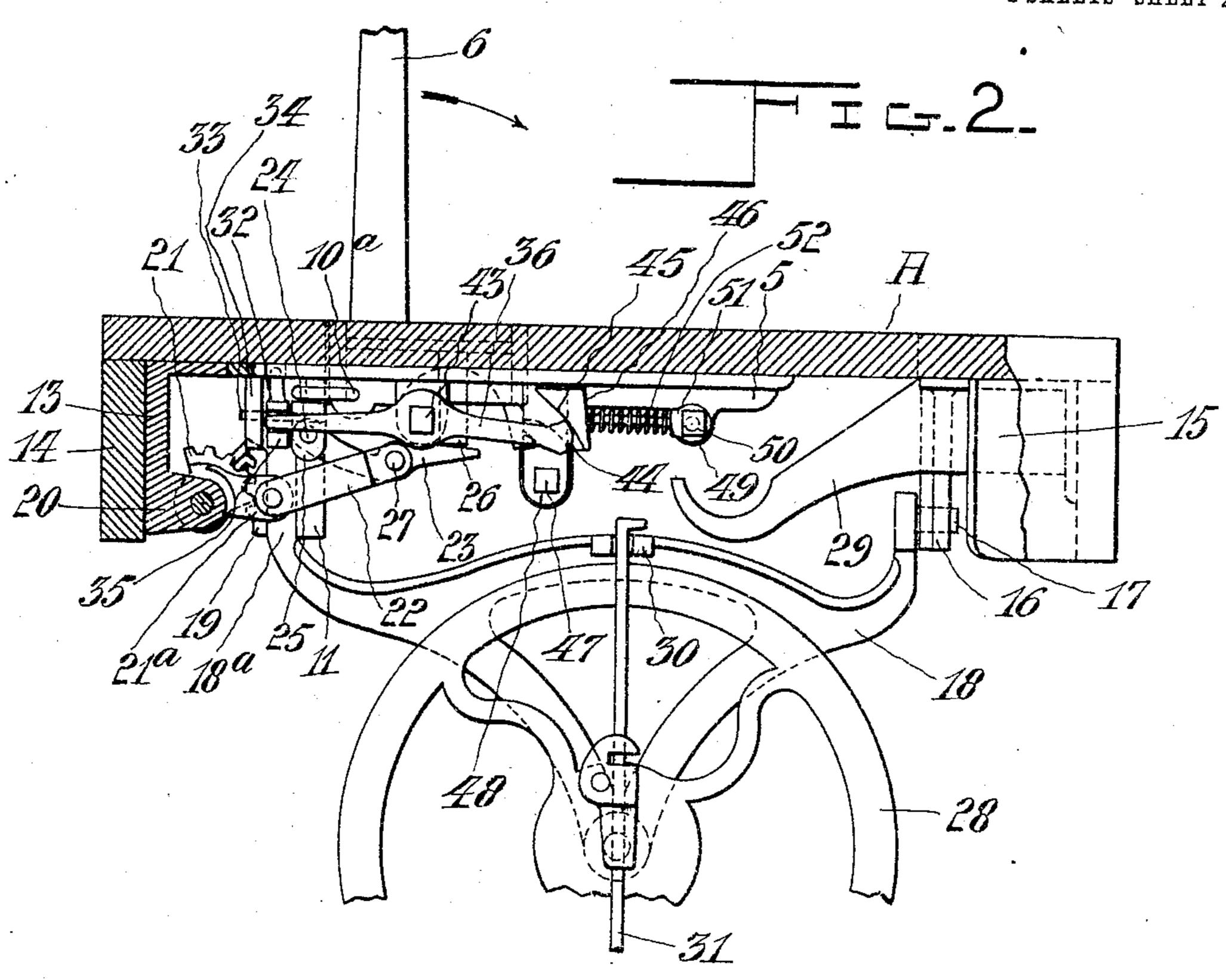


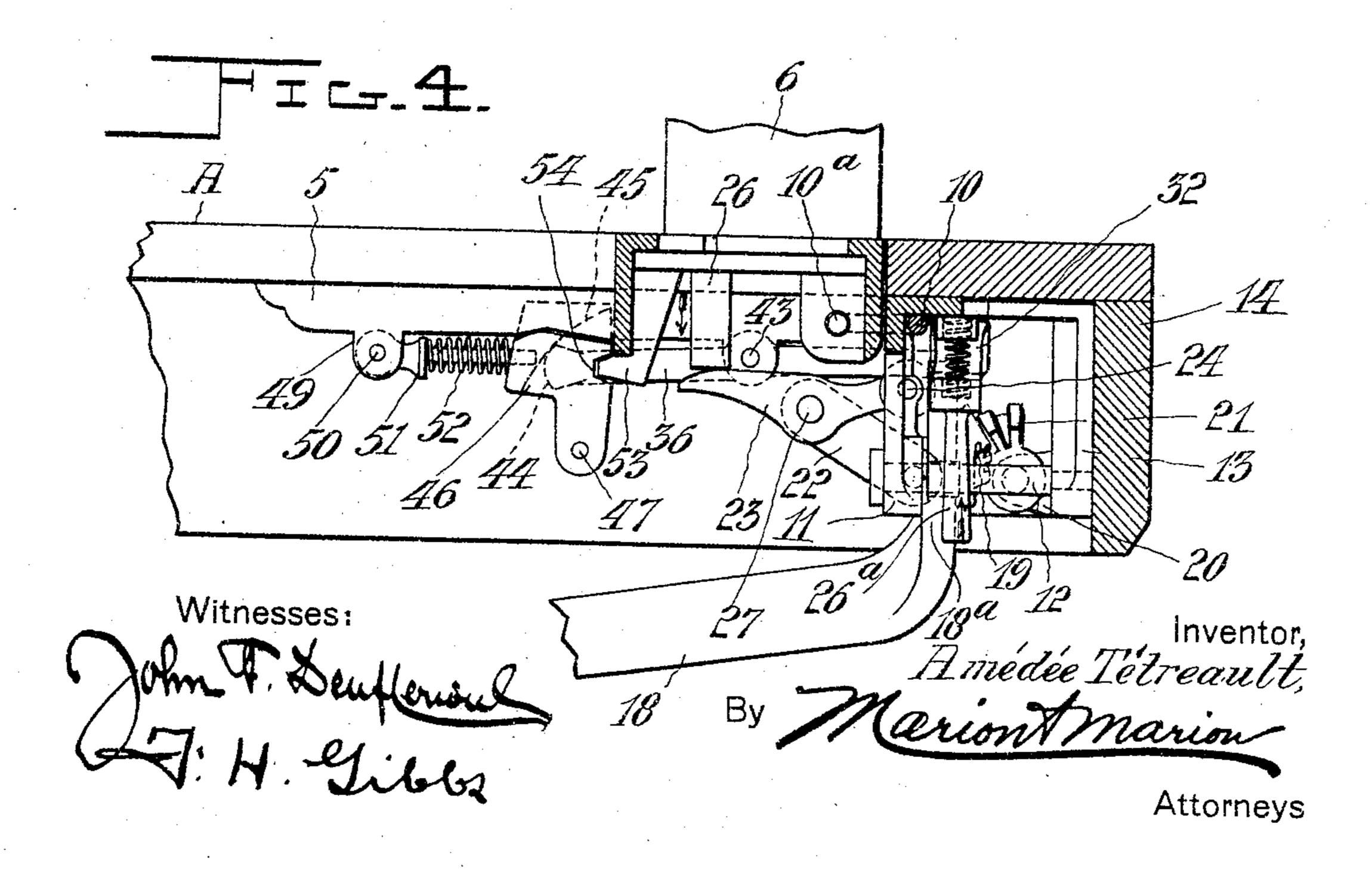


A. TETREAULT. SEWING MACHINE.

APPLICATION FILED OUT, 27, 1904.

2 SHEETS-SHEET 2.





United States Patent Office.

AMÉDÉE TÉTREAULT, OF COATICOOK, CANADA, ASSIGNOR TO COMPAGNIE DES MOULINS A COUDRE DE COATICOOKE, OF STANSTEAD, CANADA.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 779,569, dated January 10, 1905. Application filed October 27, 1904. Serial No. 230,174.

To all whom it may concern:

Be it known that I, Amédée Tétreault, a subject of the King of Great Britain, residing at Coaticook, county of Stanstead, in the 5 Province of Quebec, Canada, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others 10 skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in sewing-machines; and it consists in certain features of novelty in the con-15 struction and arrangement thereof, all as hereinafter more fully described, and specifically pointed out in the claims.

The object of the invention is to produce a sewing-machine wherein the head and the 20 driving-wheel may be folded when not in use.

Referring to the annexed drawings, illustrated in the invention, it will be noted that in all of the views the full lines illustrate the position of the parts therein shown when the 25 machine is in position for use—that is, with the head up and the driving-wheel in a vertical position.

In said drawings, Figure 1 represents an inverted plan view of the invention, showing 3° the driving-wheel in dotted lines in a folded position. Fig. 2 is a sectional view taken approximately on line 2 2 of Fig. 1. Fig. 3 is a fragmentary sectional view taken approximately on line 3 3 of Fig. 1; and Fig. 4 is a 35 fragmentary view taken approximately on line 4 4 of Fig. 1, the parts in Figs. 2, 3, and 4 being shown in an upright position.

Secured to the table A or other supporting-frame of the machine is a casting 5, which, 4° as shown in Fig. 1, extends upon three sides of the head 6, said casting being secured upon the under side of the table A, as shown in said Fig. 1.

Pivotally connected with the casting 5 is a 45 lever 7, which is pivoted at 8 to said casting 5 and carries the lug 9 between said pivot and the long end of said lever, while a push-rod 10 is connected with said lever at the opposite

side of its pivot. This rod extends longitudinally of the casting 5, as shown in Fig. 1, and 50 is bent, as shown in that figure, with a return portion 10°, which return bent portion, with the lug 9, engage with perforations in the head 6 and serve as pintles upon which said head is pivotally supported, and it will be evi- 55 dent that when the lever 7 is thrown in the direction indicated by the arrow in Fig. 1 the lug 9 and portion 10^a will be disengaged from the head 6, and said head may be removed from the table, if desired.

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The casting 5 is provided with a downwardly-extending lug 11, in which is mounted the spindle 12 at one end, while its opposite end is carried in the casting 13, which, as is shown in said Fig. 1, is connected with the 65 vertical side plates 14 of the machine-table frame. At the opposite side of the table is a casting 15, provided with a depending perforated lug 16, in which is mounted the pintle 17. Mounted on the pintle 17 and spindle 12 70 is a wheel-carrying bracket 18. This wheelbracket 18 terminates at one end in the portion 18^a, upon which is mounted the gear-segment 19, which segment is rigidly connected with said portion 18^a, so as to be movable 75 therewith.

The casting is provided with an offset perforated lug 20, in which is rotatably mounted the segmental gear 21, on which is the offset perforated lug 21^a, which lug is connected by 80 means of the link 22 with the lever 23, which lever is hung on the pin 24 in the downward extension 25 of the casting 5, so that when the wheel-bracket is rocked upon its pivots the intermeshing segmental gears 19 and 21 85 will be rotated, thereby throwing the arm 23 into contact with the pin 26, which pin extends downwardly from the head 6 below the supporting-table of the machine, and it will be evident that when the head 6 is rocked upon 90 its supports 9 and 10°, as shown by the arrow in Fig. 2, to throw said head to a position parallel with the surface of the table A said pin 26 will impinge the arm 23, thereby carrying said arm downwardly, and as the link 95 22 is pivoted at 27 to said arm 23 at one end

and to the lug 21^a at its opposite end it will be evident that said segmental gear 21 will be rocked upon its pivotal support, and by reason of the intermeshing of the gears 21 and 5 19 the gear 19 will be rocked to carry the wheel-supporting arm 18 to the position shown in dotted lines in Fig. 1, thereby carrying the driving-wheel 28 to the position shown in dotted lines in said figure and causing the 10 head 6 to rest parallel or approximately parallel with said arm 18 and wheel 26.

It will be noted that the casting 15 is provided with the hooked arm 29 on the hooked portion of which the extension 29° of the head 15 6 may rest when in a lowered position, and this supporting-hook will be found convenient as a means for relieving the shock incident to

folding the parts referred to.

The wheel-bracket 18 is provided with the 20 slotted guideway 30 to hold the pitman-rod 31 in position when it is intended to fold the machine to prevent injury to said pitman-rod.

Means for locking and for releasing the parts referred to are provided as follows: The 25 pin 26° is carried by the lever 32, which lever is pivoted at 33 in the lug 34, which extends downwardly from said casting 5, and said lever 32 terminates at the end thereof opposite the pin 26° in the bifurcations 35, which bi-30 furcations embrace the outer end of the camlever 36. The lever 32 is provided with a spring-seat 37, in which rests the spring 38, which is seated at its opposite end in the corresponding spring-seat 39, carried by said cast-35 ing 5, and the tendency of the spring 38 is to throw the pin 26° normally downwardly, whereby the seat 40 in the lever 32 is adapted to engage with either end of the dogs 41 or 42, according to the position of the wheel-40 bracket 18. The dogs 41 and 42 are carried by the end 18° of said wheel-bracket and are preferably integral therewith. When the wheel-bracket is thrown to an approximately vertical position, the dog 41 will engage with 45 the seat 40, and when said wheel-bracket is folded to a position approximately parallel with the table A the dog 42 will engage with said seat 40, and owing to the angularity of these parts 40, 41, and 42 and the expansive power 50 of the spring 38 it will be evident that the wheel-bracket will be locked thereby firmly in either of the desired positions. The cam-

lever 36 is pivotally supported at 43 and terminates at its inner end in the cam-shaped 55 portion 44, which is adapted to impinge the cam-face 45 of the U-shaped locking member 46, which locking member is pivoted at 47 upon the perforated lug 48, extending down-

wardly from said casting 5.

In convenient proximity to the member 46 is a perforated stud 49, also integral with the casting 5, and supported upon the pin 50, passing through said stud, is a spring bearing-rod 51, upon which is carried the coil-spring 52, 65 which spring bears against the locking mem-

ber 46, forcing the same toward the downwardly-extending lug 53, which is carried by the head 6, and causing the seat 54 of said member 46 to engage the member 53 to lock the head in a vertical position, as shown in 7°

Figs. 2 and 4.

When it is desired to lower the head from this position, the pin 26° is forced upwardly, as indicated by the arrow in Fig. 4, against the spring 38, thereby rocking the lever 32 75 upon its pivot, carrying the outer end of the cam-lever 36 downwardly and causing the camshaped inner end thereof to impinge the cam 45 of the locking member 46, thereby rocking said locking member 46 away from the 80 lug 53 against the spring 52, whereupon the head may be folded, and owing to the intermeshing gears connecting the head and the treadle-bracket when the head is thrown down the wheel-bracket will be raised to an ap- 85 proximately horizontal position, so that the head and wheel-bracket will rest approximately parallel with the table A.

While I have shown in the accompanying drawings the preferred form of my invention, 90 it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the 95 right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structures

set forth.

Having described my invention, what I 100 claim, and desire to secure by Letters Patent, 1S---

1. In a sewing-machine, a pivotally-supported driving-wheel bracket, a pivotally-supported head, and means adapted to rock and 105 elevate said driving-wheel bracket when the head is rocked to an approximately horizontal

position.

2. In a sewing-machine, supporting means, a head and a driving-wheel bracket carried 110 thereby, said head and bracket being adapted to occupy approximately vertical, and approximately horizontal, positions, and means for lifting the bracket to an approximately horizontal position when the head is being low-115 ered to an approximately horizontal position.

3. In a sewing-machine, a pivotally-supported driving-wheel bracket, a pivotally-supported head, and means adapted to rock and elevate said driving-wheel bracket when the 120 head is rocked to an approximately horizontal position, in combination with means for locking said head in vertical position.

4. In a sewing-machine, a pivotally-supported driving-wheel bracket, a pivotally-sup- 125 ported head, and means adapted to rock and elevate said driving-wheel bracket when the head is rocked to an approximately horizontal position, in combination with means for lock

ing said bracket in such vertical position.

5. In a sewing-machine, a support, a driving-wheel bracket rockably mounted thereon, a segment movable with said bracket, a head rockably mounted on said support, a second segment supported in engagement with said first segment, an extension depending from said head, a pivoted arm extending into the path of movement of said extension, and a link connecting said pivoted arm with said second segment.

6. In a sewing-machine, a support, a head and a driving-wheel bracket rockably mounted thereon, a segment on said bracket, a second segment in mesh with said first segment, and means for rocking both of said segments when said head is rocked to an approximately horizontal position.

7. In a sewing-machine, a support, a pivoted driving-wheel-supporting bracket, locking-dogs thereon, a lever supported in position to engage said dogs, and a spring bearing upon said lever.

8. In a sewing-machine, a support, a pivoted driving-wheel-supporting bracket, locking-dogs thereon, a lever supported in position to engage said dogs, and a spring bearing upon said lever, in combination with a pivoted head, a segment adapted to be rocked when said head is tilted to an approximately horizontal position, and a second segment on said bracket meshing with said first-mentioned segment.

9. In a sewing-machine, a support, a pivoted driving-wheel-supporting bracket mounts ed thereon, a segment carried by said bracket, a second segment on said support, a rockable head, a depending member on said head, an arm in the path of movement of said depending member, a link connecting said arm with said second segment, and means for locking

said bracket in approximately vertical and approximately horizontal positions.

10. In a sewing-machine, a supporting means, a rockably-mounted head and a rockably-mounted driving-wheel bracket, locking-45 dogs on said bracket, a spring-actuated locking-lever coöperating with said dogs, a spring-actuated lock, a member on said head coöperating with said lock, and a rockable lever adapted to release the lock for said head.

11. In a sewing-machine, a support, a head and a driving-wheel bracket rockably mounted thereon, means for locking said head and said bracket in a vertical position, a segment on said bracket, a second segment in mesh 55 therewith, an arm mounted below said head, a depending member on said head adapted to impinge said arm, and a link connecting said arm with said second segment, whereby when the head is swung to an approximately hori- 60 zontal position the bracket will be rocked to a position approximately parallel therewith.

12. In a sewing-machine, a supporting-casting, a lever pivotally mounted thereon, a lug extending from said lever at one side of 65 its pivot, a rod connected with said lever at the opposite side of its pivot, said rod having a return bent portion, which with said lug serve as supporting means for a head, in combination with a pivotally-supported driving- 70 wheel bracket, and means for locking said bracket in a vertical and in a horizontal position.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

AMÉDÉE TÉTREAULT.

Witnesses:

PHILEAS A. DEVINNE, HORMIS DAS BOUSQUET.