L. W. G. FLYNT.

MASSAGING MACHINE.

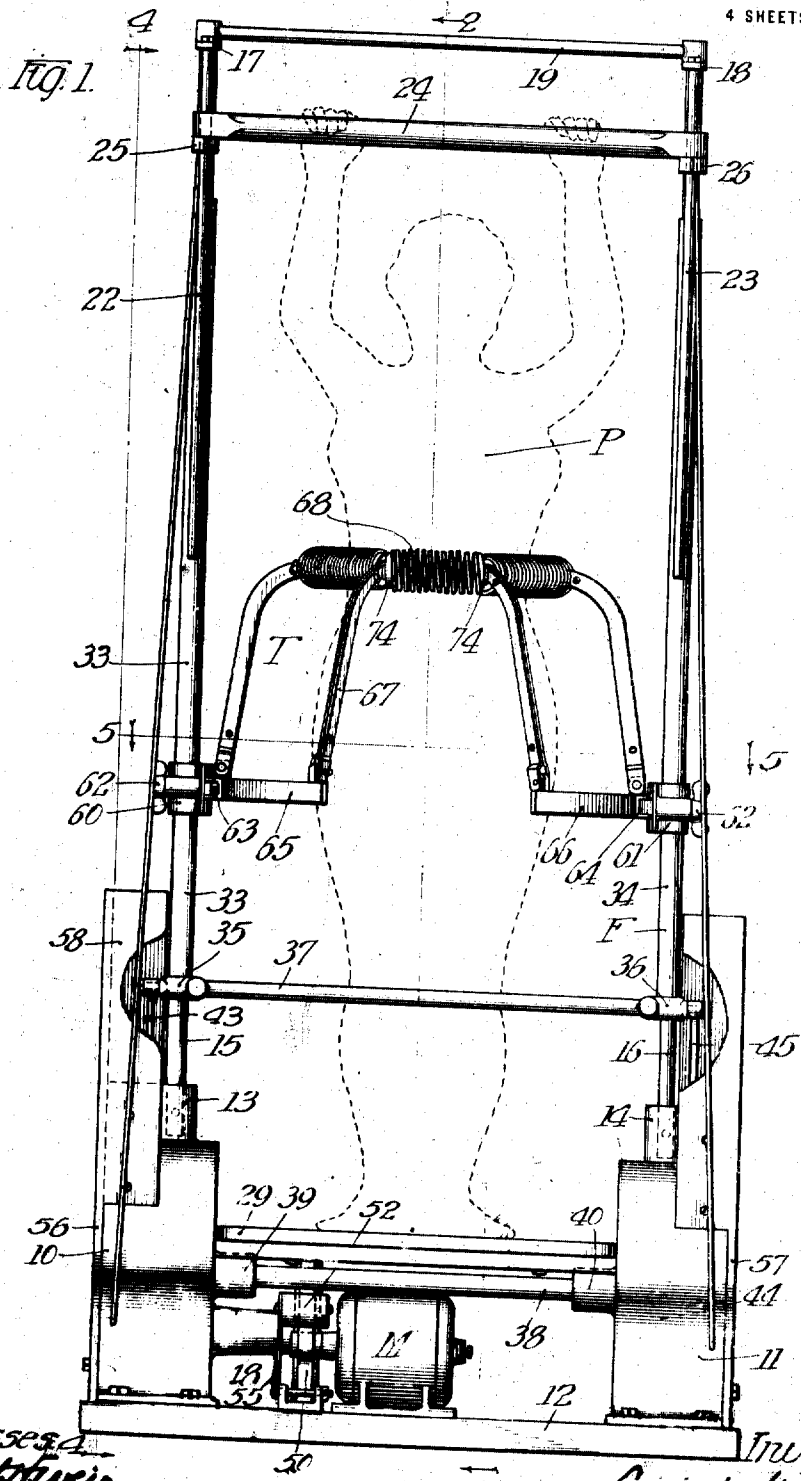
APPLICATION FILED JAN. 31, 1916.

1,250,118.

Patented Dec. 11, 1917.

4 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
Robert Neier
Arthur M. Carlson

Inventor:
Louis W. G. Flynt
James R. Offield Atty

L. W. G. FLYNT.

MASSAGING MACHINE.

APPLICATION FILED JAN. 31, 1916.

1,250,118.

Patented Dec. 11, 1917.

4 SHEETS—SHEET 2.

Fig. 2.

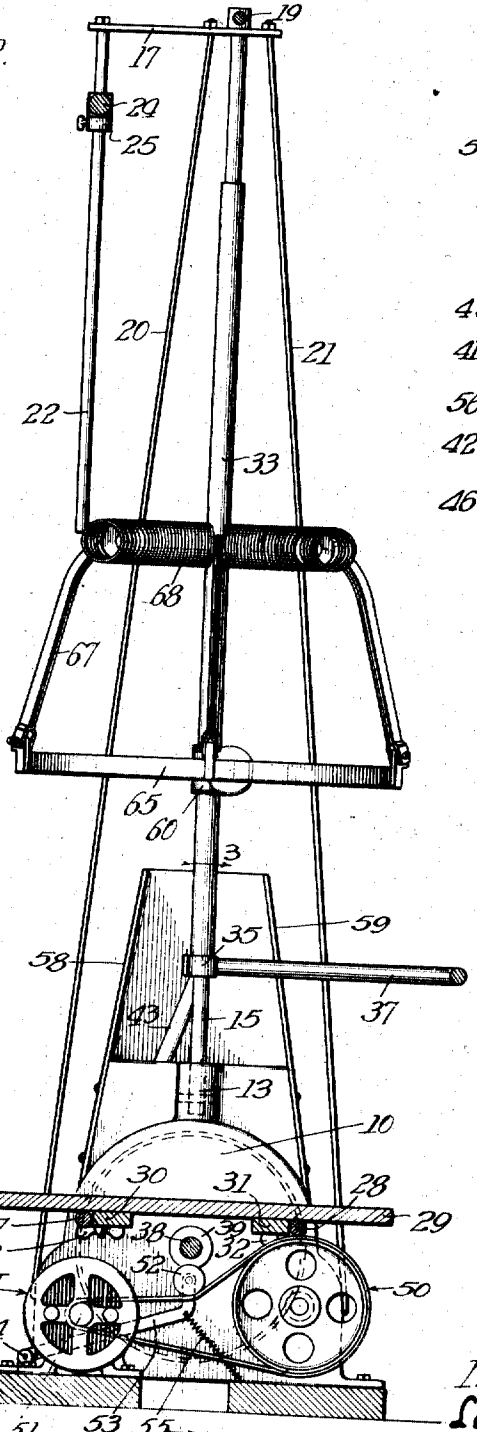
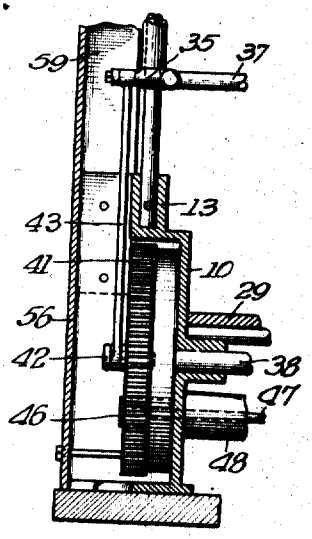


Fig. 3.



Witnesses:
Robert F. Weir
Arthur M. Carlson

Inventor
Louis W. G. Flynt
James R. Offield Atty

L. W. G. FLYNT.

MASSAGING MACHINE.

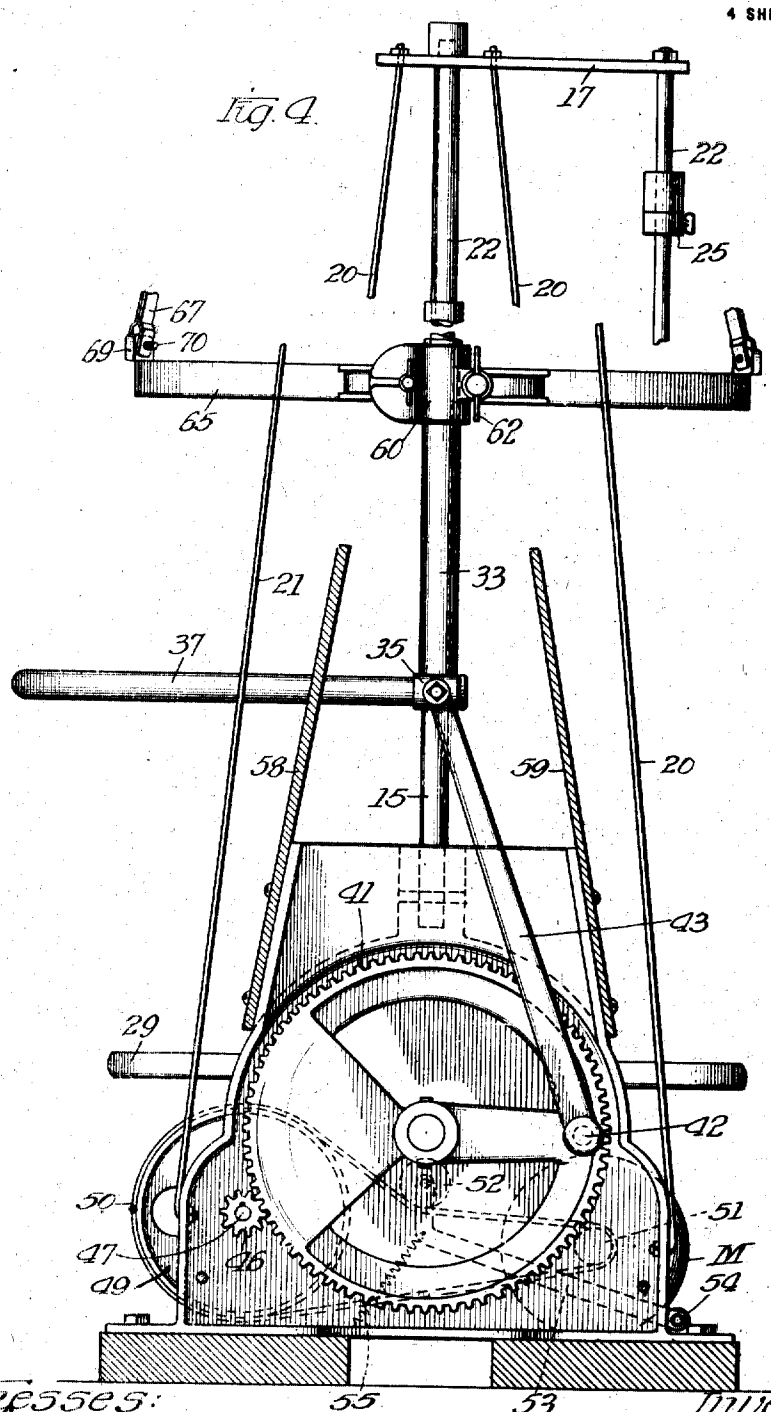
APPLICATION FILED JAN. 31, 1916.

1,250,118.

Patented Dec. 11, 1917.

4 SHEETS—SHEET 3.

Fig. 4.



Witnesses:
Robert F. Weir
Arthur M. Carlson

Inventor
Louis W. G. Flynt
James R. Offield Atty

L. W. G. FLYNT.

MASSAGING MACHINE.

APPLICATION FILED JAN. 31, 1916.

1,250,118.

Patented Dec. 11, 1917.

4 SHEETS—SHEET 4.

Fig. 5.

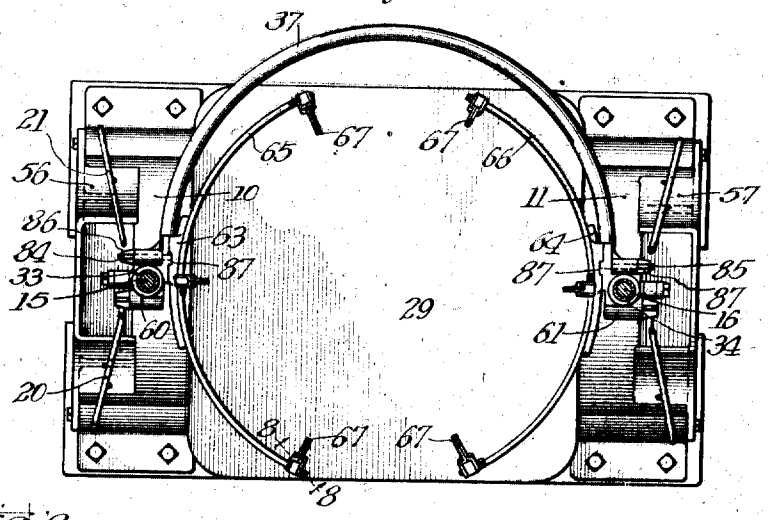


Fig. 8.

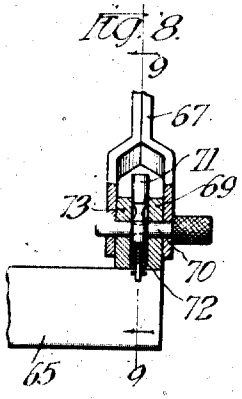


Fig. 7.

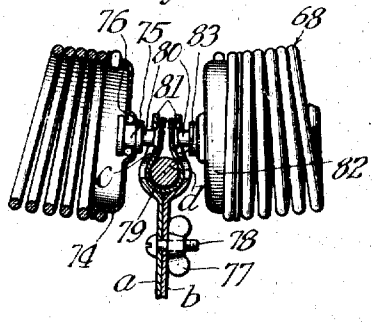


Fig. 9.

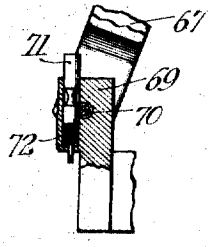
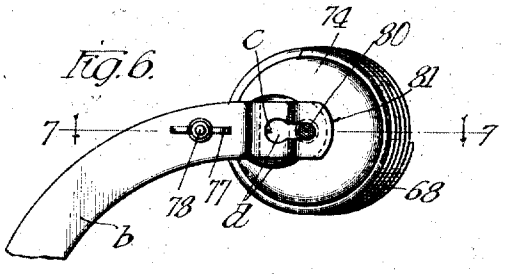
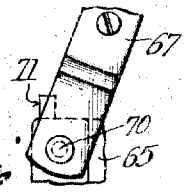


Fig. 6.





Witnesses:
Robert F. Weir
Arthur M. Carfield

Inventor
Louis W. G. Flynt
James R. Offield Atty.

UNITED STATES PATENT OFFICE.

LOUIS W. G. FLYNT, OF MORSEMERE, NEW JERSEY.

MASSAGING-MACHINE.

1,250,118. Specification of Letters Patent. Patented Dec. 11, 1917.

Application filed January 31, 1916. Serial No. 75,275.

To all whom it may concern:

Be it known that I, LOUIS W. G. FLYNT, a subject of Great Britain, and a resident of Morsemere, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Massaging-Machines, of which the following is a specification.

My invention relates to massaging machines, particularly to that class comprising a stand and a massaging tool together with means for reciprocating the tool over the body of the person on the stand, and the invention may be considered an improvement over the structure disclosed in my Patent No. 1,175,513 of March 14, 1916. The patent referred to covers particularly the massaging tool while the present invention covers improved construction and arrangement for the tool and the supporting stand or frame therefor and power mechanism for controlling the reciprocation of the tool. One of the objects of the invention is to provide an improved radially yieldable supporting frame for the massaging tool proper, which tool is in the form of a ring composed of spring sections. Another object is to provide improved vertically reciprocatory mechanism on which the tool supporting frame is adjustably mounted. Another object is to provide simple and efficient means, preferably electrically controlled, for effecting reciprocation of the support for the tool structure.

The above and other objects of my invention will be clearly understood by reference to the accompanying drawings in which—

Figure 1 is a front elevational view of the machine or apparatus,

Fig. 2 is a sectional view on plane 2—2, Fig. 1,

Fig. 3 is a sectional view of one side of the machine on plane 3—3, Fig. 2,

Fig. 4 is a sectional view on plane 4—4, Fig. 1, (enlarged scale)

Fig. 5 is a sectional view on plane 5—5, Fig. 1,

Fig. 6 is an enlarged side elevational view of one of the supporting arms for the massaging ring,

Fig. 7 is a sectional view on plane 7—7, Fig. 6,

Fig. 8 is an enlarged sectional view on plane 8—8, Fig. 5, and

Fig. 9 is a sectional view on plane 9—9, Fig. 8.

Describing the machine, side standard frames in the form of castings 10 and 11 are secured to a rectangular base 12 and at their tops these standards are enlarged to form sockets 13 and 14 for receiving the lower ends of posts 15 and 16, these posts terminating at their upper ends in parallel transverse plates 17 and 18, the tops of the posts being connected by a beam 19. The posts are rigidly held in vertical position by stay rods 20 and 21 extending from the plates 17 and 18 to the frames 10 and 11. Extending downwardly from the front ends of the plates 17 and 18 are rods 22 and 23 on which a handle bar 24 is adjustable vertically, adjustable collars 25 and 26 supporting the bar in any adjusted position against downward movement. Extending between the frames 10 and 11 at the front and rear thereof are supporting rods 27 and 28 for the platform 29, cleats 30 and 31 secured to the under side of the platform abutting against these rods to hold the platform against lateral displacement, while winged buttons 32 on the under side of the cleats are adapted to be swung into position below the bars to thus hold the platform against vertical displacement. When the buttons are removed from the bars the platform may be readily detached.

The posts 15 and 16 receive the tubes 33 and 34 to whose lower ends fittings 35 and 36 are secured and connected together by the semi-circular brace member 37. The tubes with the fittings and brace member form a supporting frame F for the tool structure T and the frame is vertically reciprocable on the posts to carry the tool structure up and down in massaging engagement with the person P standing on the platform 29.

Describing first the mechanism for effecting reciprocation of the frame F, an electric motor such as M is preferably provided for furnishing the power, this motor being shown mounted at the front of the base between the castings 10 and 11. A shaft 38 extends across the machine below the platform 29 and into the interior of the frames 10 and 11 which are hollow, the shaft being journaled in bearing extensions 39 and 40 on the inner sides of the said frames. Within the frame 10 the shaft 38 has secured thereto a gear 41 having the crank pin 42, and the connecting rod 43 is pivoted at its lower end on this crank pin and at its upper end is

pivoted to the fitting 35 of the frame F. Within the casting 11 the shaft 38 has secured thereto a crank wheel (not shown) which is connected to the fitting 36 of the frame F by a connecting rod 45. The arrangement is such that when the shaft 38 is turned the connecting rods will be bodily raised and lowered to effect ready reciprocation of the frame F on the posts 15 and 16. Meshing with the gear 41 is a pinion 46 which is secured to the inner end of the shaft 47 journaled in the bearing extension 48 on the frame 10. Secured to the inner end of the shaft is a belt pulley 49, a belt 50 passing about this pulley and the driving pulley 51 on the shaft of the motor M. When the motor is running the pinion 46 causes comparatively slow rotation of the crank gear 41 and the shaft 30 on which this gear and the crank wheel 44 are mounted, the frame F being then reciprocated on its supporting posts. In order to tense the belt 50 an idler pulley 52 engages against the top thereof and is journaled in the end of a lever 53 pivoted at its outer end to the side of the frame 10 as indicated at 54, a spring 55 pulling on the lever to yieldingly press the idler against the belt. The hollow frames 10 and 11 containing the crank wheels have detachable side covers 56 and 57, these covers extending upwardly beyond the frames and each provided with inward extensions 58 and 59 to form a protecting housing or guard for the upper ends of the connecting rods.

Describing now the tool structure T, supporting blocks 60 and 61 are vertically adjustable on the tubes 33 and 34 and each is adapted to be clamped in adjusted position by a wing screw 62. The blocks 60 and 61 support on their inner faces plates 63 and 64 and these plates mount respectively the substantially semi-circular bars 65 and 66. At the ends of the bars and at intermediate points thereof arms 67 are pivoted and extend upwardly and support at their upper ends the annular massaging tool built up of spring sections 68. As best shown in Figs. 6 to 9, the arms are formed of two halves *a* and *b*, the lower ends of which are separated to receive pivot lugs 69 on the bars 65 and 66. As shown in Figs. 8 and 9, the pivot pin 70 for each arm is normally locked in position by a key 71, a spring 72 permitting depression of the key to bring its groove 73 in line with the pin so the pin may be withdrawn. Each spring section 68 has a cap 74 at each end at the center of which is swiveled a coupling 75 which has ball bearing engagement with the cap. The sides *a* and *b* of each arm 67 are held together at their upper ends by a screw 78 and wing nut 77. The ends of the halves *a* and *b* fork outwardly to form a pocket 79 whose sides have the slots *c* and *d* for receiving the necks 80 of the couplings, the slots at their lower ends being sufficiently large to receive the heads 81 of the couplings, but at their tops being narrower. In the pocket 79 is inserted a filler pin 82 and receiving this pin is a U-shaped spring bushing 83. When the spring sections are to be mounted on the arms the wing nuts 78 are unscrewed and the arm halves *a* and *b* spread apart. The heads 81 are then inserted through the slots *c* and *d* and the nuts 78 are tightened to securely clamp the parts together, the spring bushings locking the coupling heads in the narrow sections of the slots *c* and *d*.

When it is desired to use the machine the annular massage ring is opened by loosening one of the nuts 78 to permit the end of one of the spring sections to be withdrawn. The person to use the machine then steps on the platform 29 and into the massaging ring and then closes the ring. A switch (not shown) for the motor circuit can be provided in convenient position so that the motor can be started. While the massaging structure T is reciprocated vertically the user grasps the handle bar 24 which is made adjustable for different persons by means of the collars 25 and 26. As the massaging structure travels up and down the spring sections expand and contract and work and massage the body.

In the drawings the massaging ring 68 is above the supporting bar 65 so that the upper part of the body may be massaged during operation of the machine. In order to swing the massaging structure T to bring the massaging structure below the bars 65 and 66 the plates 63 and 64 are rotatable on the blocks 60 and 61, trunnion bolts 84 and 85 extending from the plates 63 and 64 respectively and through the blocks 60 and 61 and engaged at their outer ends by wing nuts 86 and 87. When the wing nuts are loosened the plates 63 and 64 can be rotated and the entire massaging structure T swung around therewith. To lock this frame in its upper or lower position tongue and groove connection 87 is provided between the plates and the supporting blocks. In either position the frame T is also vertically adjustable by means of clamping screws 62.

I thus provide a machine which can be adjusted for different persons and on which the massaging tool can be adjusted to take effect on different parts of the body to be massaged. I do not of course desire to be limited to the exact construction and arrangement shown and described as modifications are no doubt possible which would still come within the scope of the invention.

I claim as follows:

1. In a massaging machine, the combination of a base structure, posts extending therefrom, tubes slidable on said posts, semi-

circular supporting members extending toward each other from said tubes, arms pivoted at one end to said supporting members and extending toward each other, spring roller sections journaled at and between the free ends of said arm to form an annular elastic massaging tool, and means for reciprocating said tubes on said posts.

2. In a massaging machine, the combination of a base structure, posts extending therefrom, a frame slidable on said posts, fittings vertically adjustable on said frame at opposite sides thereof, semi-circular extensions from said fittings forming a substantially circular support, arms pivoted at one end to said extensions, spring roller sections rotatably secured at and between the free ends of said arms for forming an annular elastic massaging tool, and means for reciprocating said supporting frame.

3. In a massaging machine, the combination of a base structure, posts extending therefrom, tubes slidable on said posts and connected together to form a supporting frame, means for reciprocating said frame on said posts, fittings vertically adjustable on said tubes, supporting ring sections extending toward each other from said fittings, arms pivoted at one end to said ring sections, and spring roller sections secured at and pivoted between the free ends of said arms to form an annular elastic massaging tool.

4. In a massaging machine, the combination of a base structure, two posts extending therefrom, fittings on said posts, vertically reciprocable thereon, supporting ring sections extending from said fittings, arms extending upwardly and radially from said ring sections, and roller sections pivoted between the free ends of said arms to form an annular massaging tool, the connection between said ring sections and fittings being adjustable to permit swing of the ring sections about their common axis.

5. In a massaging machine, the combination of a base structure, two posts extending therefrom, fittings vertically reciprocable on said posts, arcuate supporting frame sections trunnioned to said fittings, arms secured at one end to said supporting frame sections, and massaging tool sections pivoted at and between the other ends of said arms to form an annular massaging tool.

6. In a massaging machine, the combination of a platform, two vertical posts, brackets extending forwardly from the tops of said posts and rods depending from the ends of said brackets, a handle bar vertically adjustable on said depending rods, and a massaging tool structure mounted on said posts to be reciprocated, and means for effecting such reciprocation.

In witness whereof I hereunto subscribe my name this 24th day of January, A. D. 1916.

LOUIS W. G. FLYNT.