

No. 842,939.

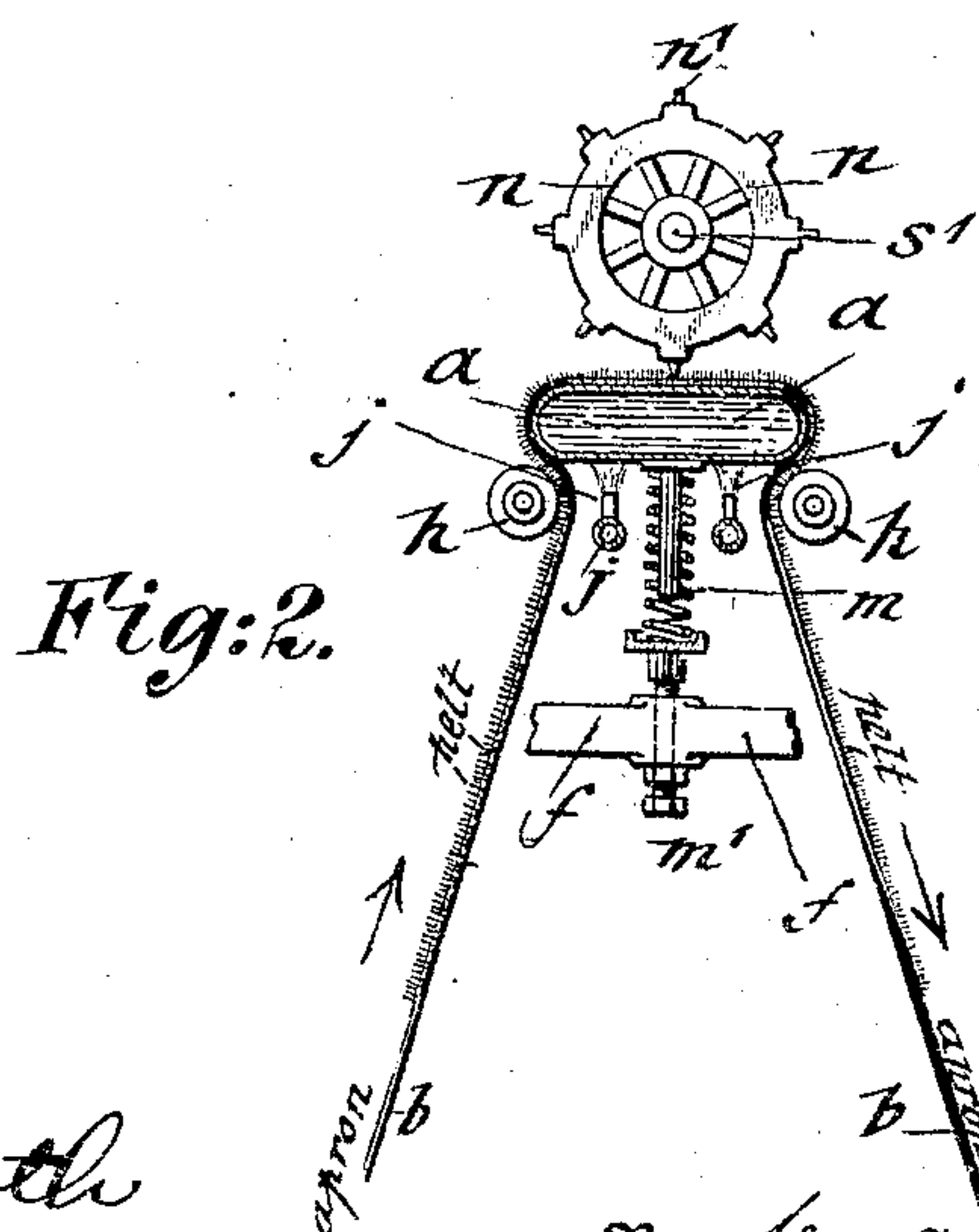
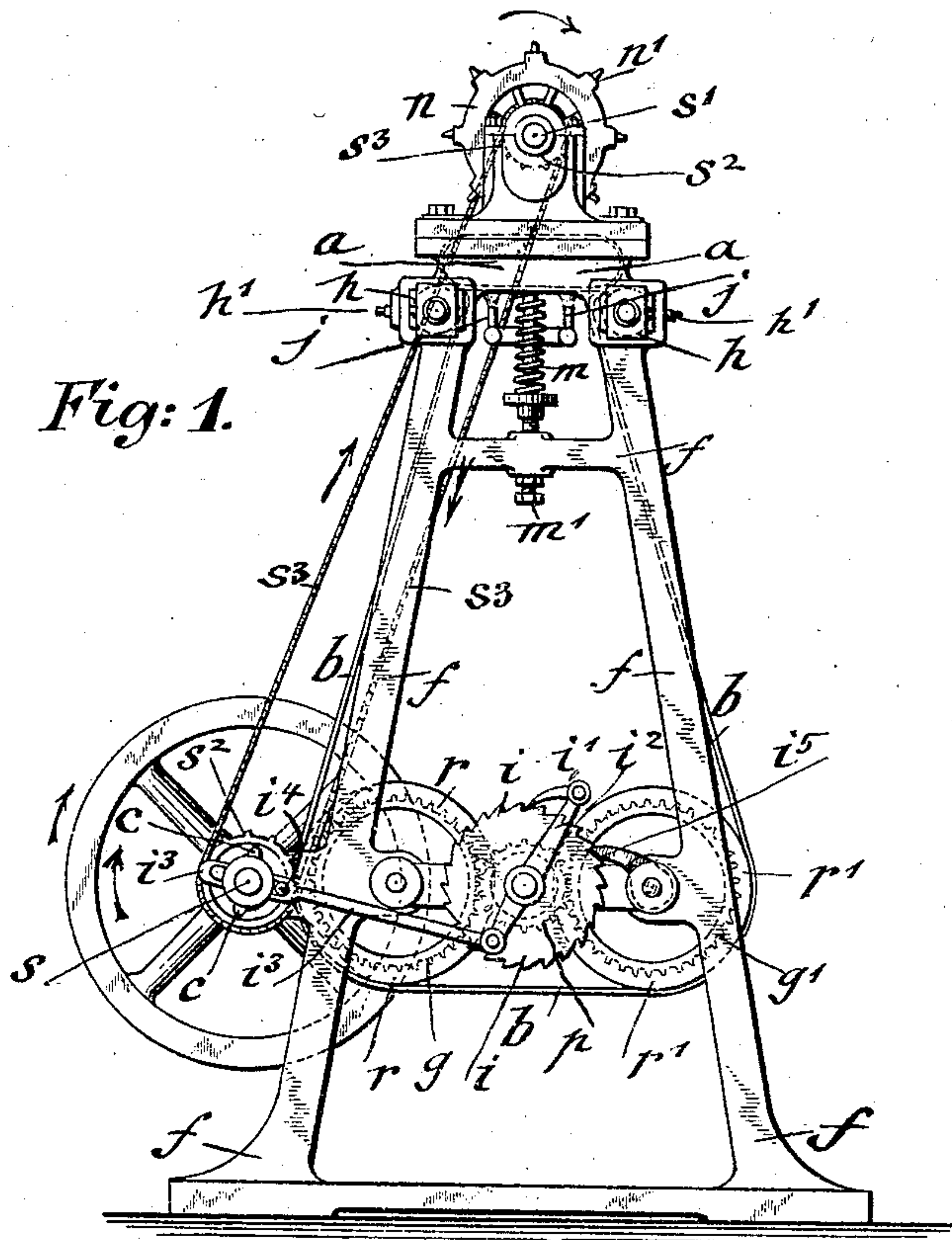
PATENTED FEB. 5, 1907.

G. CIMIOTTI.

MACHINE FOR REMOVING WATER HAIRS FROM PELTS.

APPLICATION FILED NOV. 9, 1905.

2 SHEETS—SHEET 1.



Witnesses  
*Jacob Roth*  
*Elsa Neuburg*

Inventor  
*Gustav Cimiotti*  
By his Attorneys  
*George Gogel*

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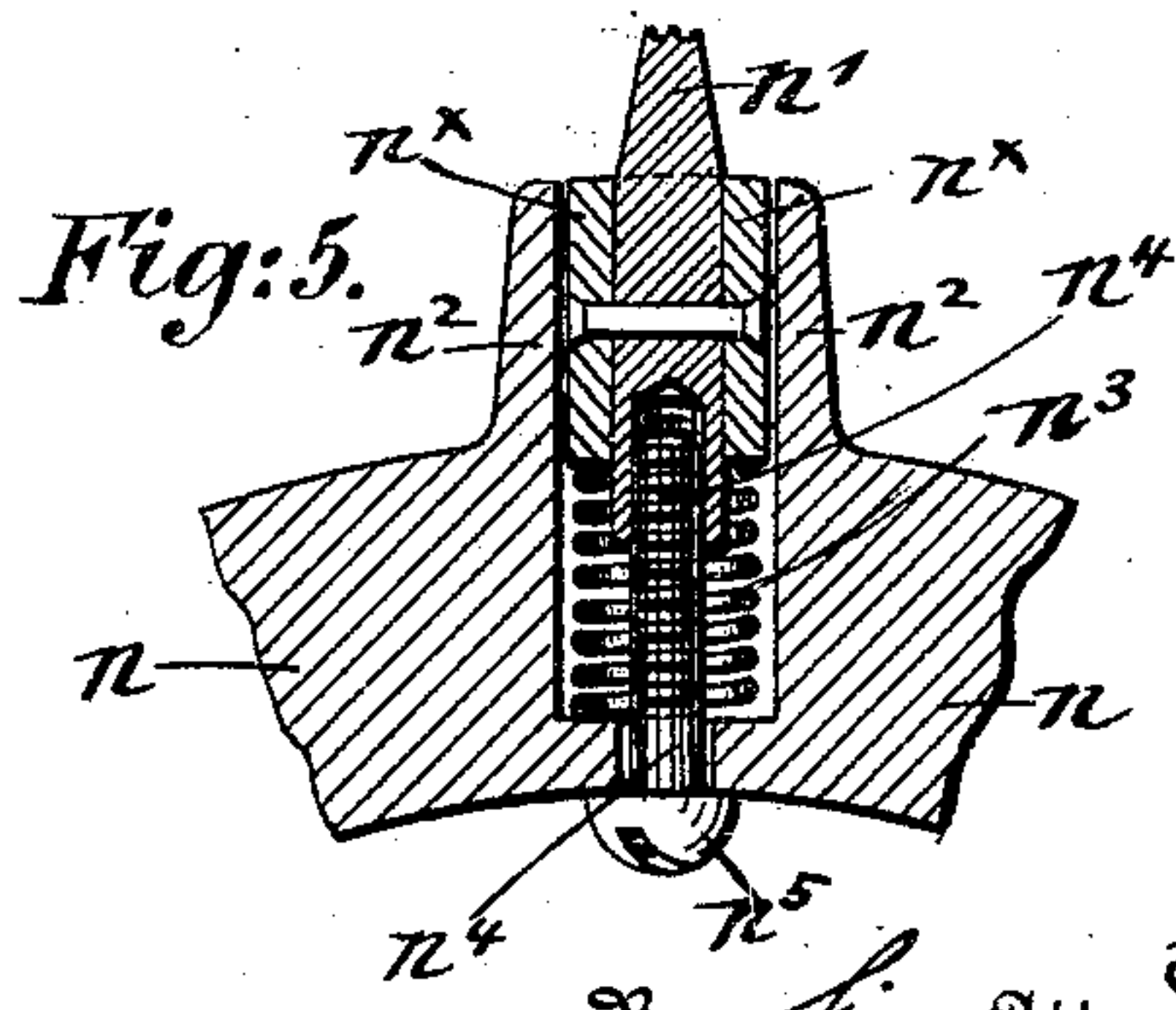
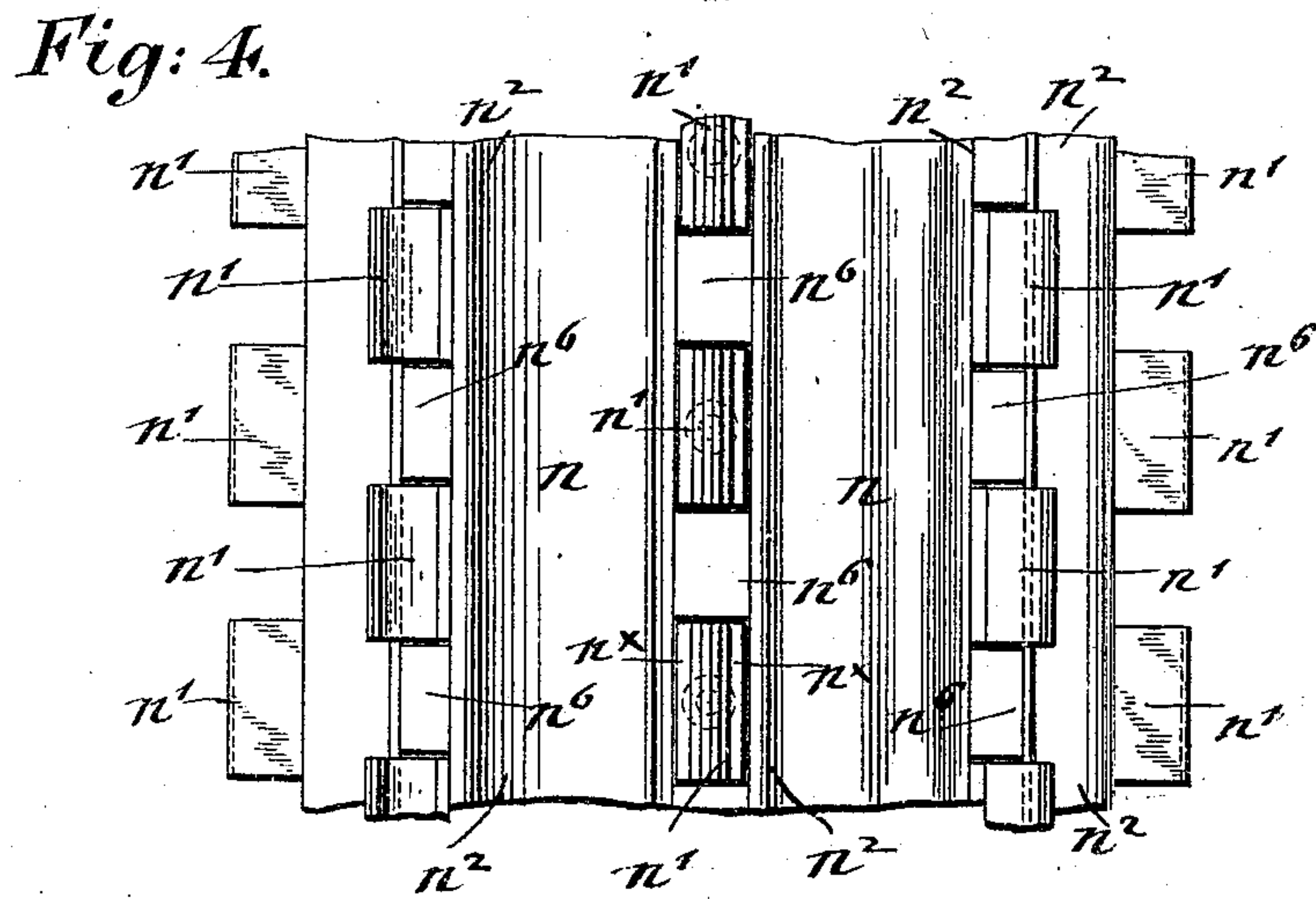
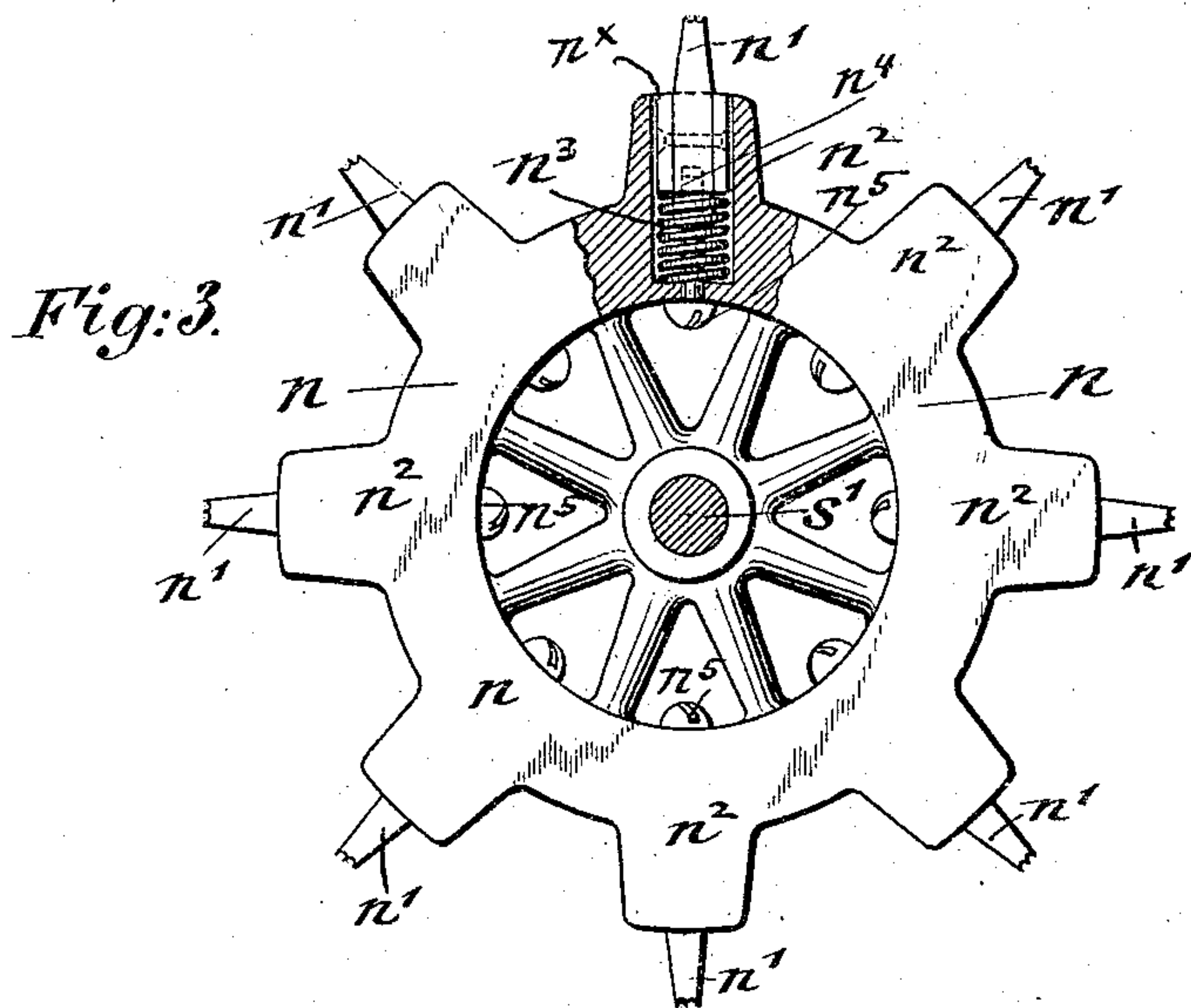
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2 SHEETS—SHEET 2.



Witnesses  
*Jacob Roth*  
*Elsa Newbury*

Inventor  
*Gustav Cimiotti*  
By his Attorneys  
*James L. Loper*



# UNITED STATES PATENT OFFICE.

GUSTAV CIMIOTTI, OF NEW YORK, N. Y.

## MACHINE FOR REMOVING WATER-HAIRS FROM PELTS.

No. 842,939.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed November 9, 1905. Serial No. 286,605.

*To all whom it may concern:*

Be it known that I, GUSTAV CIMIOTTI, a citizen of the United States, residing in New York, in the borough of Manhattan, county  
5 and State of New York, have invented certain new and useful Improvements in Machines for Removing Water-Hairs from Pelts, of which the following is a specification.

This invention relates to an improved machine for removing the water-hairs from  
10 pelts—such as seal, otter, beaver, conies, and other skins—while they are in their fresh or salted state and before they are dyed.

Among the particular objects of the invention is the provision of a machine in which  
15 means are provided for heating the pelt, whereby the removal of the water-hairs is facilitated.

A further object of the invention is to provide improved means for mounting the apron-supporting platform.

The invention also purposes the provision of an improved arrangement of the wipers in the wiper-drum and improved means for  
25 mounting and limiting the movement of each wiper.

With these ends in view the invention consists in the novel features and combinations of parts to be hereinafter described, and finally  
30 pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of my improved machine for removing water-hairs from pelts. Fig. 2 is a vertical transverse section through  
35 the platform and rotary wiper-drum and tension-rollers of the machine. Fig. 3 is a side elevation of the wiper-drum, partly in section and drawn on a larger scale. Fig. 4 is a plan view of the same; and Fig. 5 is a  
40 vertical transverse section through one of the wipers and its socket, drawn on a still larger scale.

Similar letters of reference indicate corresponding parts in the different figures of the  
45 drawings.

Referring to the drawings, *a* represents a platform, which is supported on a frame constituted by upright substantially A-shaped side frames *ff*, that are connected by transverse  
50 braces in any suitable manner. The platform *a* is preferably made hollow and filled with water and heated by suitable gas-jets *j*, arranged below the platform, as shown in Fig. 2, or by any other means.  
55 Over the platform is slowly moved an endless apron *b*, by means of transverse feed-rollers

*rr'*, which are driven by gear-wheels *g g'*, attached to the shafts of the rollers, said shafts being supported in journal-bearings at the lower parts of the side frames *ff* near the  
60 ends of the same. The apron *b* passes around the feed-rollers *rr'*, the pelt to be un-haired being attached to the apron at one end and gradually fed with the apron over the platform and between tension-rollers *h h*,  
65 which are supported below the platform and in close proximity to the ends of the same, as shown in Figs. 1 and 2, said tension-rollers being capable of lateral adjustment by set-screws *h' h'*, acting on the journal-bearings of  
70 the same.

Rotary motion is imparted to the gear-wheels *g g'* of the feed-rollers *rr'* by means of a ratchet-wheel *i*, which is engaged by a pawl  
75 *i'*, pivoted to the upper end of an oscillating lever-arm *i<sup>2</sup>*, which turns loosely on the hub of the ratchet-wheel *i* and which is connected at its lower end by a crank-rod *i<sup>3</sup>* with a driving-shaft *S*. Said driving-shaft carries  
80 cams *c*, which engage an antifriction-roller *i<sup>4</sup>* on the slotted end of the connecting-rod *i<sup>3</sup>*, so as to produce for each rotation of the driving-shaft *S* two actuations of the pawl *i'*  
85 and ratchet-wheel *i* and move the latter for the distance of two teeth. A check-pawl *i<sup>5</sup>* prevents the ratchet-wheel *i* from turning in the opposite direction. On the shaft of the  
90 ratchet-wheel is mounted a pinion *p*, which is located between the gear-wheels *g g'*, so as to intermesh with the same and impart thereby a step-by-step motion to the gear-wheels and the apron. The platform *a* is supported on  
95 cushioning-springs *m*, the tension of which may be adjusted by screw-nuts *m'*, so as to yield to some extent to the pressure exerted thereon in removing the water-hairs from the pelt.

Above the platform is arranged a shaft *S'*, which is rotated in journal-bearings *S<sup>2</sup>*, supported in the side frames *ff*. On the shaft  
100 *S'* is mounted a wiper-drum *n*. The shaft *S'* has fixed thereon a sprocket-wheel *S<sup>2</sup>*, and said wheel and said shaft are rotated by a chain *S<sup>3</sup>* passing over the former, and another sprocket-wheel *S<sup>2</sup>*, mounted on the  
105 driving-shaft *S*. The wiper-drum *n* is provided with a number of radial wipers *n'*, as shown in Fig. 3, each being supported and guided by side plates *n<sup>x</sup>* in a socket *n<sup>2</sup>*, extending longitudinally of the wiper-drum and  
110 cushioned by helical springs *n<sup>3</sup>*, interposed between the heads of the wipers and the bot-



tom of the sockets  $n^2$ , as shown in Fig. 5. Into the heads of the wiper are screwed shanks  $n^4$ , which pass freely through openings in the inner walls of the wiper-sockets. 5 The lower ends of said screws are provided with nicked heads  $n^5$ , which act in the nature of stops to limit the outward movement of the wipers and permit the adjustment of the tension of the cushioning-springs. The 10 outer faces of the wipers are provided with parallel horizontal serrations, which exert a biting action on the water-hairs as the pelt is fed gradually over the platform  $a$ . The wipers  $n'$  are arranged in longitudinal rows 15 on the wiper-frame and separated by solid portions  $n^6$ , the wipers of one row being located intermediately between the wipers of the adjacent rows in the so-called "staggered" disposition, as shown in Fig. 4, so 20 that all the water-hairs of the pelt are successively acted upon by the wipers without any one escaping the friction action of the serrated faces of the same. As the pelts are subjected before being acted upon by the 25 wipers at both sides to the softening action of a brine liquor, the roots of the water-hairs are loosened and the hairs gradually drawn out by the repeated frictional action of the rotating wipers on the same.

30 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a machine for removing water-hairs from pelts, the combination of a platform, a 35 pelt-carrying apron movable in contact with said platform, and means for heating said platform.

2. In a machine for removing water-hairs from pelts, in combination, a platform constructed to contain a liquid, means to heat 40 such liquid, and a pelt-carrying apron movable over said platform.

3. In a machine for removing water-hairs from pelts, a platform, a pelt-carrying apron 45 movable over the upper surface of said platform, and means to heat said platform upon its lower surface.

4. The combination, with a hollow platform constituting a liquid-receptacle, of 50 burners arranged beneath said platform, a pelt-carrying apron movable over the upper surface of the latter, and a pelt-wiping device above said platform.

5. In a machine for removing water-hairs 55 from pelts, an apron-supporting platform, and springs beneath said platform and upon which the same rests directly.

6. A machine for removing water-hairs from pelts, including an apron-supporting 60 platform, springs to sustain the same, and means to vary the tension of said springs.

7. In a machine for removing water-hairs from pelts, in combination, an endless pelt-carrying apron, means to yieldingly sustain the same at one point, and a yielding wiper 65 device to cooperate with said apron at such point.

8. In a machine for removing water-hairs from pelts, a rotary wiper-drum having a plurality of longitudinally-disposed sockets in its 70 periphery, and wipers seated in said sockets and arranged in staggered relation.

9. In a machine for removing water-hairs from pelts, a rotary wiper-drum having a plurality of recesses or sockets extending from 75 end to end, wipers seated in said sockets and arranged in longitudinal rows, and solid portions extending between the wipers in each of said rows.

10. A wiper-drum having a socket therein, 80 a spring-cushioned wiper seated in said socket, and adjustable means secured to said wiper and extending through the inner wall of said socket to limit the outward movement of said wiper. 85

11. A wiper-drum having a socket therein, a spring-cushioned wiper seated in said socket, and a screw screwed into said wiper and passing loosely through the inner wall of 90 of said socket, the head of said screw being arranged at the side of said wall which is opposite said wiper. 95

12. In a machine for removing water-hairs from pelts, a wiper-drum having a socket therein, there being an opening in the inner 95 wall of said socket, a wiper in said socket, a screw extending through said opening and having its shank screwed into said wiper, the head of said screw being disposed toward the center of the drum and acting as a stop to 100 limit the outward movement of said wiper, and a helical spring embracing the shank of said screw and interposed between said wiper and the inner wall of said socket.

13. A machine for removing water-hairs 105 from pelts, comprising in its construction a supporting-frame, a platform supported thereon, burners arranged beneath said platform, rollers journaled in the lower part of said frame, a pelt-carrying apron passing over 110 said platform and said rollers, a pelt-wiping device above said platform, apron-driving mechanism, and an operative connection between said mechanism and said pelt-wiping device. 115

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAV CIMIOTTI.

Witnesses:

PAUL GOEPEL,  
HENRY J. SUHRBIER.