

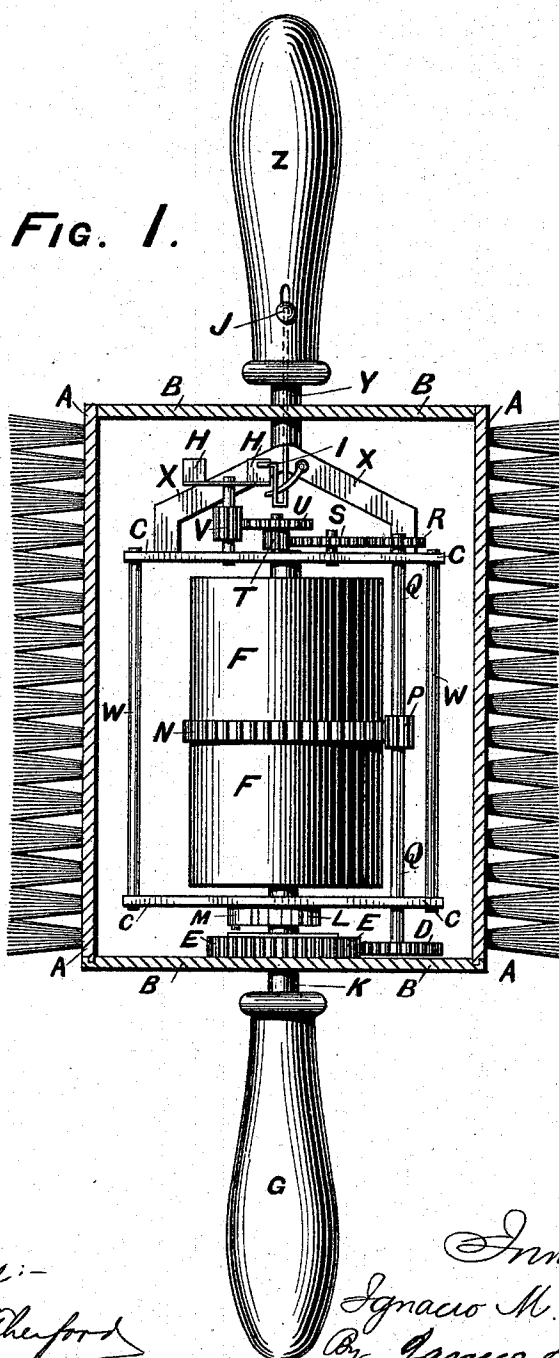
(No Model.)

3 Sheets—Sheet 1.

I. M. TINTORÉ.
ROTARY HAIR BRUSHING MACHINE.

No. 528,044.

Patented Oct. 23, 1894.



Witness:-
J. A. Ruthenford
J. H. Daly

Inventor:
Ignacio M. Tintore
By James L. Norris
Attorney.

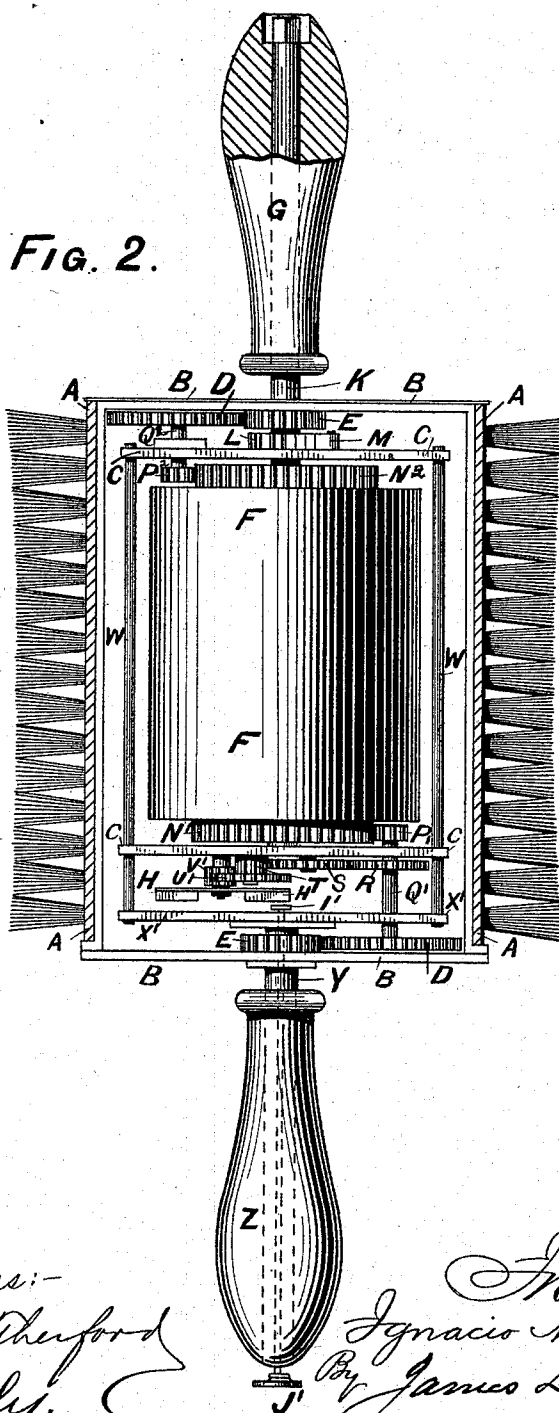
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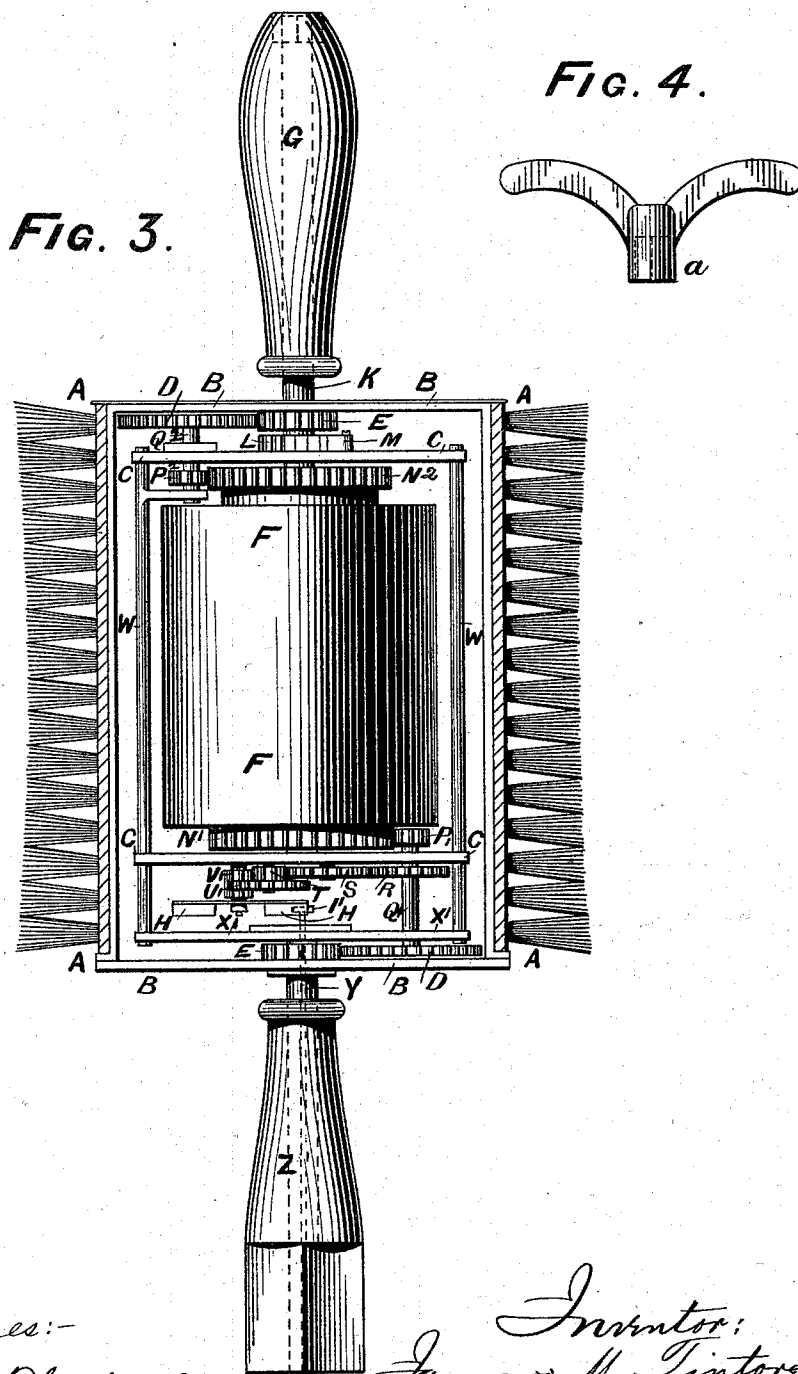
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UNITED STATES PATENT OFFICE.

IGNACIO MARIA TINTORÉ, OF LONDON, ENGLAND.

ROTARY HAIR-BRUSHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 528,044, dated October 23, 1894.

Application filed June 9, 1891. Serial No. 395,675. (No model.) Patented in England October 22, 1890, No. 16,869, and No. 8,740, dated May 22, 1891, and in France May 23, 1891, No. 213,652.

To all whom it may concern:

Be it known that I, IGNACIO MARIA TINTORÉ, a subject of the King of Spain, residing at 32 Charlotte Street, Fitzroy Square, London, England, have invented new and useful Improvements Connected with Rotary Hair-Brushing Machines, (patented in Great Britain, No. 16,869, dated October 22, 1890, and No. 8,740, dated May 22, 1891, and in France, No. 213,652, dated May 23, 1891,) of which the following is a specification.

This invention has for its object certain improvements in or connected with the driving mechanism by which a rotary hair brushing machine can be operated at the desire or will of the assistant.

The article is intended for use by hair dressers and will enable the rubber band, the overhead wheels, and the shaft, and also the usual driving engine or the power wheel to be dispensed with.

Figure 1 is a longitudinal sectional view of my improved brush. The spring of this apparatus can be wound up by holding one handle and revolving the brush. Figs. 2 and 3, are modifications of apparatus in which the winding up of the spring can be effected by a key; Fig. 4, an elevation of key to fit over square of spindle to wind up the spring.

For the purpose of my invention and as I show I make the brush stock A hollow and of cylindrical shape, with ends B B and I fit a train of wheels to a frame or case C which I arrange in the cylindrical brush stock A. One of the wheels D is in gear with a toothed ring E in the stock, so that it can be rotated therefrom.

In a barrel or casing F I arrange a powerful spring which can be wound up by a handle or a key *a* fitted at one end of the cylinder.

In connection with the train of wheels I use a pair of fliers H, H, and also a brake or stop appliance I which can be released by the thumb of hand acting on the button J at the time the article has to be used.

It will be observed by the drawings that the shaft K which is attached to the spring in the barrel is provided with a ratchet wheel L into which a pawl M is engaged, said pawl being on the casing C to prevent the brush cylinder rebounding or unwinding while the

brush is being rotated to wind up the spring. This shaft K terminates just outside the right hand side plate of the casing C, so that it has no connection with the train of wheels on that side of the plate, the rotative working motion being from the barrel wheel N, pinion P, spindle Q to D and E at one end and through pinion P, spindle Q to pinion R and thence through the gears S, T, U, V, to the fliers H, H.

The end plates C, C, of the inner casing are held rigidly at the proper distance apart by the tie rods W, W.

X is a bridge connecting the stem Y of the handle Z with the casing C, the brush stock being free to rotate thereon, and on the shaft K when the brake I is released from the flier.

To wind up the spring in the barrel F, the handle Z is held firmly in one hand and the handle G or the key *a* is turned by the other hand, the pawl slipping over the teeth of the wheel L during said operation.

In Figs. 2 and 3, a rod is shown passing longitudinally through the handle to be acted upon by a key *a* for winding the spring, the operation being the same as that shown in Fig. 1. A button J' is also shown in the end of the handle, to act on the brake I' to release the fliers. In place of the barrel wheel N, I may use the spur wheels N', N², located at the sides of barrel F, motion being imparted from said wheel N' to pinion P', spindle Q', to gears R, S, T, U, V', to fliers H, H; and from wheel N² to pinion P², spindle Q², pinion D to E.

In Fig. 3, the handle Z' is shown with a square end to take into a hole of a floor, or a wall, during the winding of the spring.

The tie rods W, W, in Figs. 2 and 3, are made longer than in Fig. 1, and have rod X' joining their ends, forming a connection between the casing C and the stem Y of the handle Z.

I am aware that self contained spring rotating hair brushes have been made before this date. Therefore I make no claim in a broad sense to such an article.

What I claim, and desire to secure by Letters Patent, is—

1. In a rotary hair brush, the combination of a hollow brush-stock, a main shaft passing

partially through said stock, a frame mounted upon said shaft within the stock and having a train of gearing connected with the brush stock, a spring-barrel surrounded by the frame and operating the gearing, a flier located within the stock and actuated by the gearing, a handle upon which the stock rotates, means for winding the barrel spring, a stop mechanism for the flier and a sliding device for operating said stop mechanism, substantially as described.

2. In a rotary hair brush, the combination of a hollow brush-stock having an attached toothed ring, a main-shaft passing partially through said stock, a frame mounted upon said shaft within the stock, a spring barrel inclosed by the frame and geared to the toothed ring, a handle upon which the brush stock rotates, means for winding the barrel spring, a stop mechanism for holding the gearing inactive, and a sliding device for operating the stop mechanism to release the gearing, substantially as described.

3. In a rotary hair brush, the combination of a hollow brush stock having an attached toothed ring, a main shaft carrying a handle and passing partially through said stock, a frame or case located within the brush-stock and carried by the main-shaft, a spring-barrel geared to the toothed ring and surrounded by

said frame, a flier mechanism driven by the barrel, means for winding the barrel spring, a stop mechanism for holding the flier inactive, and a sliding rod for operating said stop mechanism to release the flier, substantially as described.

4. In a rotary hair brush, the combination of a hollow brush-stock having an attached toothed ring at one end, a flier mechanism at the opposite end, a main shaft passing partially through the brush stock, a spring barrel mounted upon said shaft and located between and geared to the toothed ring and to the flier mechanism, a handle on which the brush-stock rotates, means for winding the barrel spring, a stop mechanism for holding the flier inactive, and a sliding device for releasing the flier, all of said operating mechanism being located within the brush-stock, substantially as described.

In witness whereof I have hereto signed my name, in the presence of two subscribing witnesses, the 28th day of May, 1891.

IGNACIO MARIA TINTORÉ.

Witnesses:

EMILIO RODRIQUEZ,

24 Fenchurch St., E. C., London, England.

ALEXANDER RIDGWAY,

19 Change Alley, London, England.