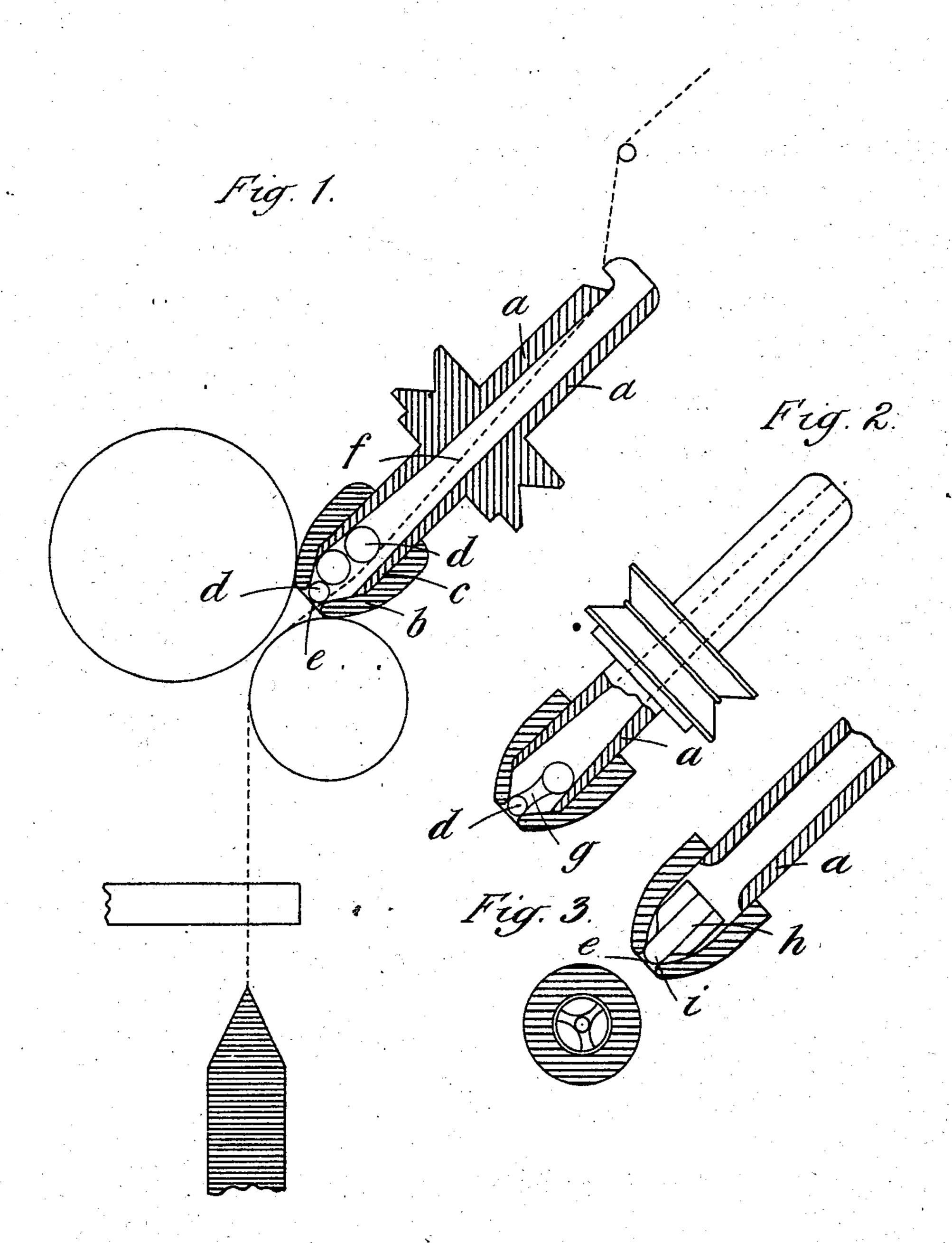
No. 721,527.

PATENTED FEB. 24, 1903.

## A. TASTÉ. TWISTING HEAD. APPLICATION FILED JUNE 20, 1902.

NO MODEL.



Witnesses.
5.0. Parker

Albert Tasté

By

James Z: Norrig.

Htty.

## United States Patent Office.

ALBERT TASTÉ, OF VERVIERS, BELGIUM, ASSIGNOR TO SOCIÉTÉ ANONYME CELESTIN MARTIN, OF VERVIERS, BELGIUM.

## TWISTING-HEAD.

SPECIFICATION forming part of Letters Patent No. 721,527, dated February 24, 1903.

Application filed June 20, 1902. Serial No. 112,536. (No model.)

To all whom it may concern:

Be it known that I, Albert Tasté, engineer, a subject of the King of Belgium, residing at Rue David, Verviers, in the Kingdom of Belgium, have invented certain new and useful Improvements Relating to Spinning or Twisting Frames, of which the following is a specification.

This invention relates to the tubes employed for imparting a false torsion to the thread in its passage through continuous spinning or twisting frames. The object sought to be attained is to permit these tubes to cause the thread to participate in their rotation without exerting upon this thread an exaggerated or prejudicial wedging action.

The invention consists, essentially, in the arrangement within such tubes of a movable part adapted to obturate the outlet-orifice, 20 and consequently to slightly catch the thread against the wall of this orifice in such a manner as to cause it to rotate with the tube and to become twisted, the pressure exerted upon the thread by this part which the rotation 25 tends to displace and to raise being produced by means of one or several other parts either rigidly connected or not with that serving to seize the thread.

Three constructional forms of my said de-30 vice are illustrated in the accompanying drawings by way of example.

As shown in Figure 1, the torsion-tube a, of cast metal and forming one with the driving-pulley, is pierced with a hole of double consciety b and c and contains several balls d, the lowermost of which perfectly obturates the outlet-orifice e. The thread f is slightly pressed by this lower ball against the wall of the orifice a, and is thus caused to rotate with the tube a and to become twisted. Owing to the upper conical portion c, with which the upper balls rotate, these latter press upon the lower ball, which the rotation tends to displace and to raise. There follows from this a moderate pressure of the whole upon the nose

e and a moderate wedging of the thread at this point.

As will be readily understood, the upper balls serving to exert pressure upon the lower ball or part obturating the orifice *e* of the 50 tube need not necessarily be independent of this obturating part.

Fig. 2 shows a constructional form in which the part d, closing the outlet of the tube a, is rigidly connected by means of a rod g with an 55 upper ball, producing the required pressure.

In Fig. 3 the obturating part and the part for producing the pressure are replaced by a single part h, terminating in an extremity i, adapted to obturate the outlet of the tube.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination with a torsion-tube for continuous spinning and twisting frames having a passage therethrough, said passage hav- 65 ing a contracted portion, of means, loosely fitted into said passage, adapted to block or obstruct the contracted portion thereof.

2. The combination with a torsion-tube for spinning and twisting frames, having a pas- 70 sage of double conicity therethrough, and means independent of the tube arranged within said passage at the place where the double conicity is present and adapted to exert pressure upon the thread passing through the 75 tube, substantially as described.

3. The combination with a torsion-tube for continuous spinning and twisting frames having a passage extending therethrough, said passage having a contracted portion, of a ball, 8c fitted into said passage, adapted to block or obstruct the contracted portion thereof.

In testimony whereof I have hereunto set my hand, in presence of two subscribing witnesses, this 4th day of June, 1902.

A. TASTÉ.

Witnesses:

J. MAGUIRE, JOS. TIANCE.