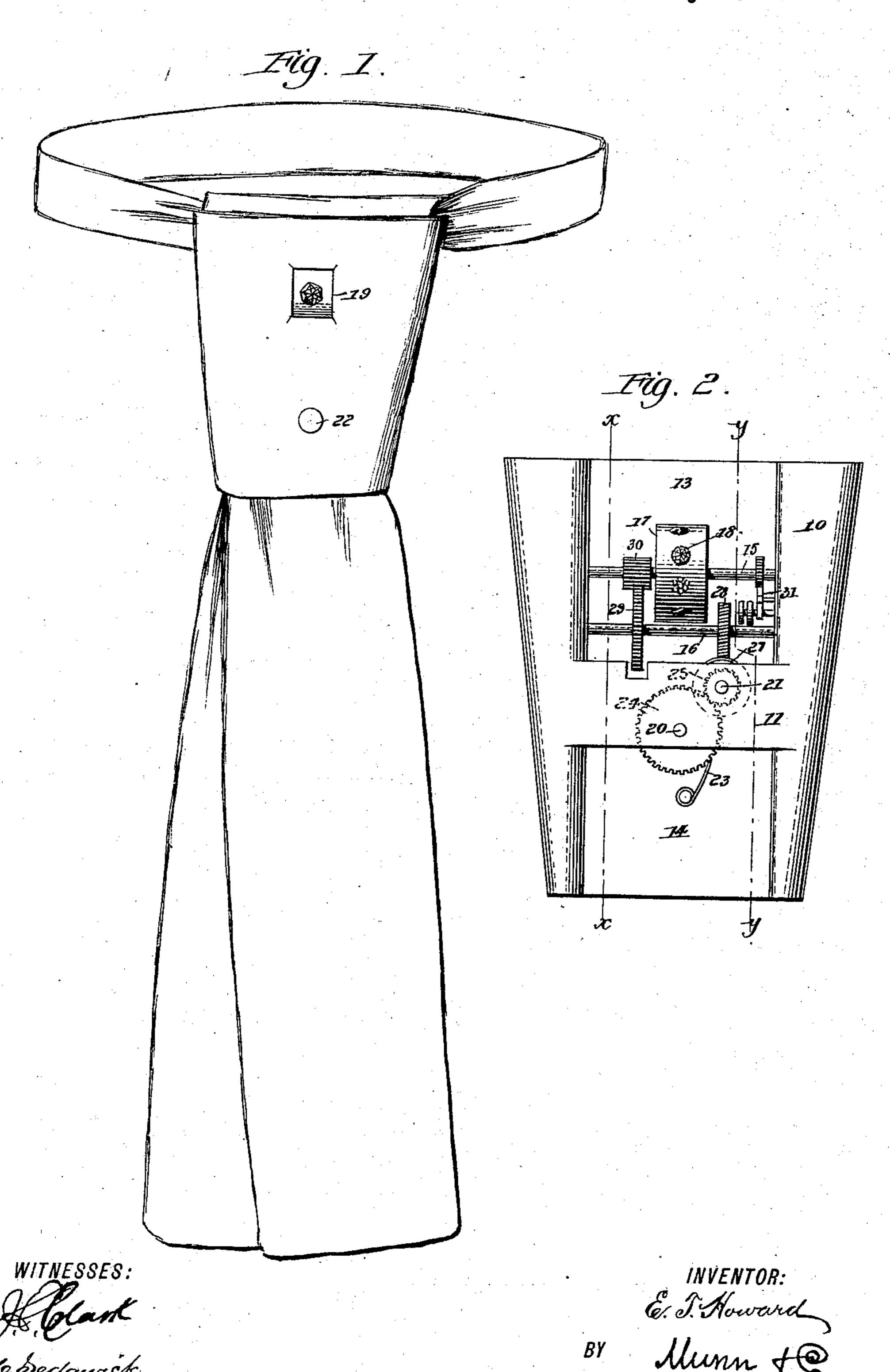
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## E. T. HOWARD. NECKSCARF.

No. 406,649.

Patented July 9, 1889.



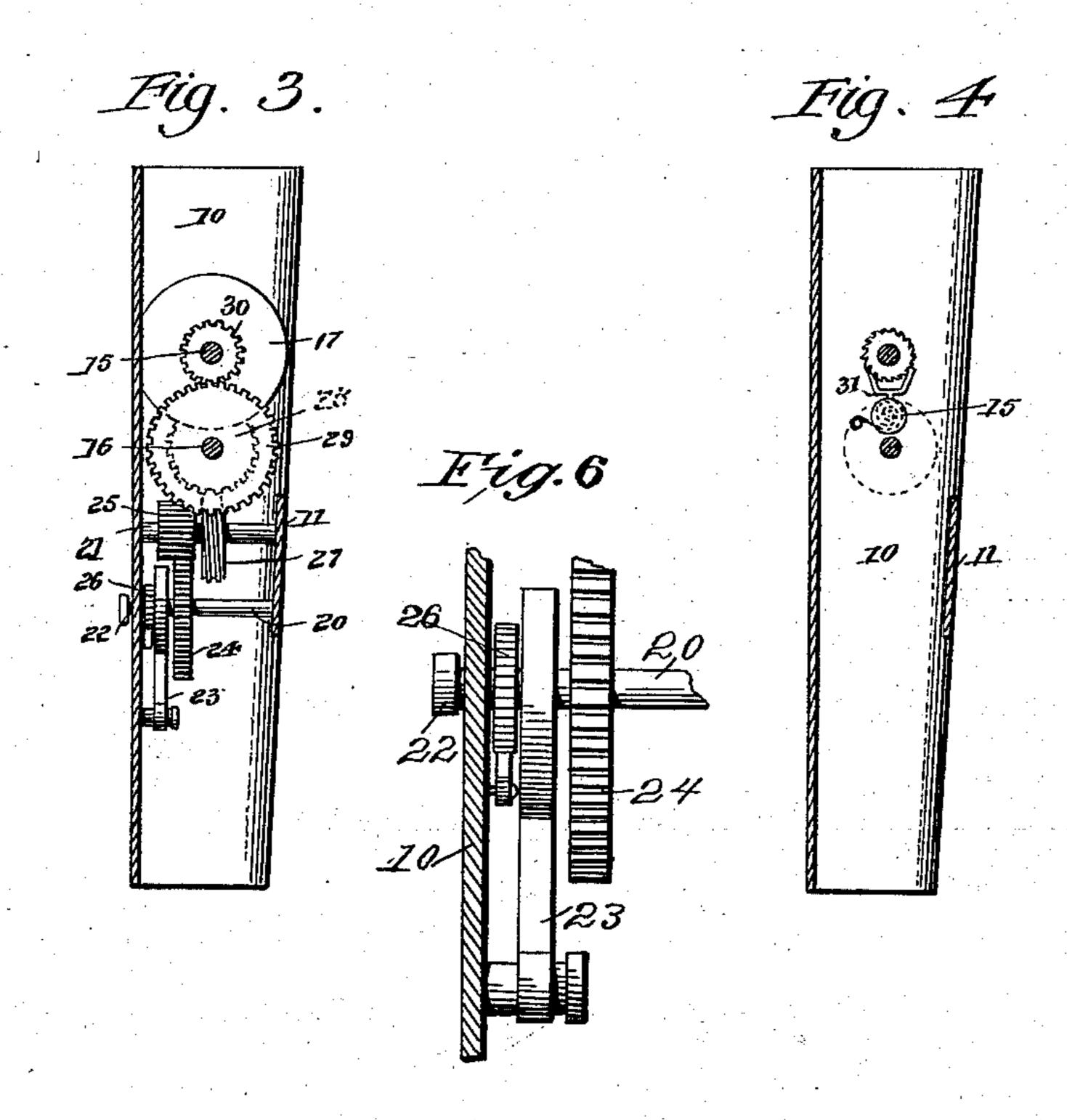
N. PETERS, Photo-Lithographer, Washington, D. C.

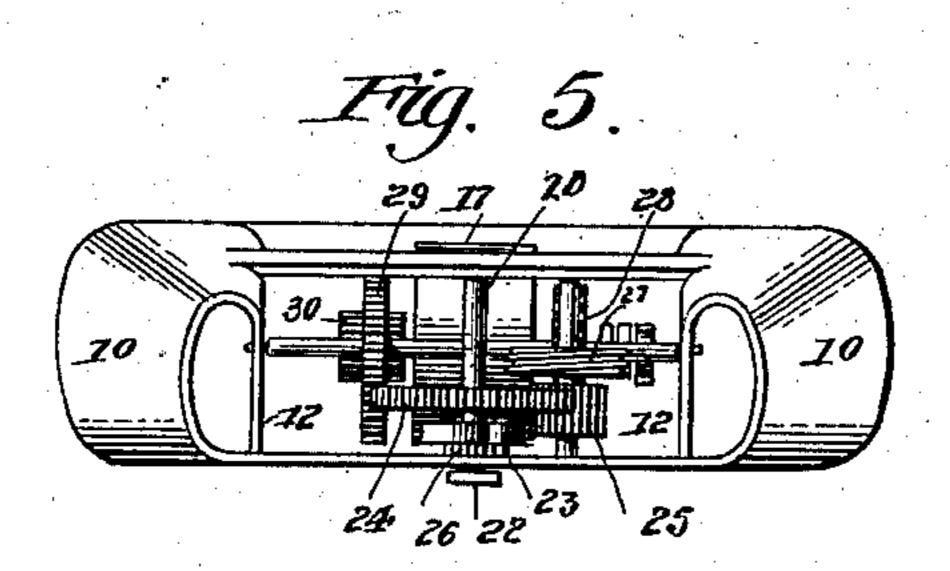
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WITNESSES: 6. Sectairick INVENTOR: E. J. Howard

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## United States Patent Office.

ELLIS T. HOWARD, OF CHICAGO, ILLINOIS.

## NECKSCARF.

SPECIFICATION forming part of Letters Patent No. 406,649, dated July 9, 1889.

Application filed March 20, 1889. Serial No. 303,947. (No model.)

To all whom it may concern:

Be it known that I, Ellis T. Howard, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Neckties, of which the following is a full, clear, and exact description.

My invention relates to an improvement in neckties, and has for its object to provide a shell upon which the tie may be constructed, and also to provide the shell with a removable ornamental wheel and means for actuating the said wheel; and a further object of the invention is to so construct the shell that predetermined portions of the wheel will be visible from the front of the shell at intervals.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of a necktie constructed in accordance with my improvement. Fig. 2 is a rear elevation of the shell detached from the tie. Fig. 3 is a vertical section through the shell on line x of Fig. 2. Fig. 4 is a similar section on line y y of Fig. 2, and Fig. 5 is a lower edge view of the shell. Fig. 6 is a detail to better show the pawl and the ratchet engaged thereby.

The shell 10 is preferably formed of very thin metal—such as tin, for instance—and is bent to the shape of the tie, being provided at its back with an essentially central transverse cross-bar 11, and the metal forming the back of the shell, at the top and bottom of the cross-bar and at each side of the shell, is bent inward upon itself to form longitudinal bearings 12, as best illustrated in Fig. 5, whereby open spaces 13 and 14 are formed in the back of the shell—one space above and the other below the cross-bar, as best illustrated in Fig. 2.

In the upper space 13 a transverse shaft 15 is journaled in the bearings 12, and below the said shaft 15 a second parallel shaft 16 is similarly journaled. Upon the upper shaft 15, at or near its center, a wheel or disk 17 is rigidly secured, in the periphery of which a series of gems 18 is set, and in the front face of the shell an aperture or opening 19 is pro-

duced, capable of displaying, for instance, one gematatime. The wheel or disk 17 is adapted to be revolved by mechanism hereinafter de- 55 scribed, and in such manner that it will turn slowly to register with the opening 19 in the shell, exposing a different jewel at intervals. I desire it, however, to be distinctly understood that I do not confine myself to the form 60 of wheel or diskillustrated, as the said wheel or disk may partake of any desired contour, and instead of being vertically arranged may be horizontally placed, and instead of having gems set therein the face of the disk or wheel, 65 or, more properly, the carrier, may have produced thereon various designs or a combination of colors.

In the front of the shell and in the crossbar 11 at the back, near the lower edge of the 70 latter, a shaft 20 is journaled, and to the right and above the said shaft, also in the shell and cross-bar, another shaft 21 is journaled. The shaft 20 is projected through the outer face of the shell and made to terminate in a but-75 ton 22, whereby the said shaft 20 may be rotated when desired.

Upon the shaft 20, which is controlled by a coil-spring 23, (shown in Figs. 2 and 5,) a master-wheel 24 is rigidly secured, meshing 80 with the pinion 25 upon the upper shaft 21. After the spring 23 has been wound up by manipulating the button 22, it is prevented from suddenly unwinding by means of a ratchet-wheel 26, secured to the said shaft and engaged by a suitable pawl 26', pivoted upon the inner side of the shell.

Upon the shaft 21, in front of the pinion 25, a worm-wheel 27 is keyed or otherwise secured, which meshes with a gear-wheel 28, fast 90 upon the transverse shaft 16. The gear-wheel 28 is located at one side of the carrier 17, and at the other side of the carrier, also upon the shaft 16, a spur-wheel 29 is rigidly secured, which spur-wheel meshes with a pinion 30, 95 attached to the upper transverse or carrier shaft 15.

The movement of the carrier-shaft is regulated by an escapement 31, of any approved construction, one form of which escapement 100 is illustrated in Fig. 4. It will thus be observed that when the spring 23 has been wound up by manipulating the button 22 the shaft 20 is revolved and motion communicated from

the said shaft 20 to the shaft 21, and through the worm 27 and gear-wheel 28 to the shaft 16, and by the spur-gear 29 upon said shaft 16 the carrier-shaft 15 is revolved by the said 5 spur-gear meshing with the pinion 30. The rapidity of the revolution of the carrier-shaft is regulated by the escapement 31. As the carrier-shaft is revolved it is evident that the carrier 17, secured thereon, will be also revolved, whereby one design or one gem at a time will be consecutively brought to view in the front through the opening 19 in the shell, as illustrated in Fig. 1.

In constructing the tie the shell is covered with material corresponding to the apron, and the button 22 is covered with the same mate-

rial used to decorate the shell.

I desire it to be further understood that, if in practice it is found desirable, the button 22 may be located at the inner end of the shaft 20, instead of at the outer end, as shown, and that I do not confine myself to the particular movement illustrated for rotating the carrier-shaft.

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

1. A form for necktie-heads consisting in a shell shaped to the contour of said head, pro-

vided with parallel flanges 12 and cross-bar 11, an opening being formed in the front of the shell, a clock-work mounted between said 30 flanges and cross-bar, a rotary carrier operated thereby and provided with peripheral ornamentations successively registering with the said front opening, substantially as set forth.

2. The combination, with a necktie having 35 an opening in its head and a small aperture below the same, of a rotary peripherally-ornamented carrier visible through said opening, a clock-work actuating said carrier, and a winding-shaft extending through the aper-40

ture, substantially as set forth.

3. The combination, with a necktie, of a shell shaped to the contour of the head of the tie and covered by the material thereof, the shell and material having registering open-45 ings, a carrier within the shell and having a series of ornaments successively registering with said openings, and mechanism within the shell for operating the carrier, substantially as set forth.

ELLIS T. HOWARD.

Witnesses:

JNO. W. LUSE, J. P. ACOAM.