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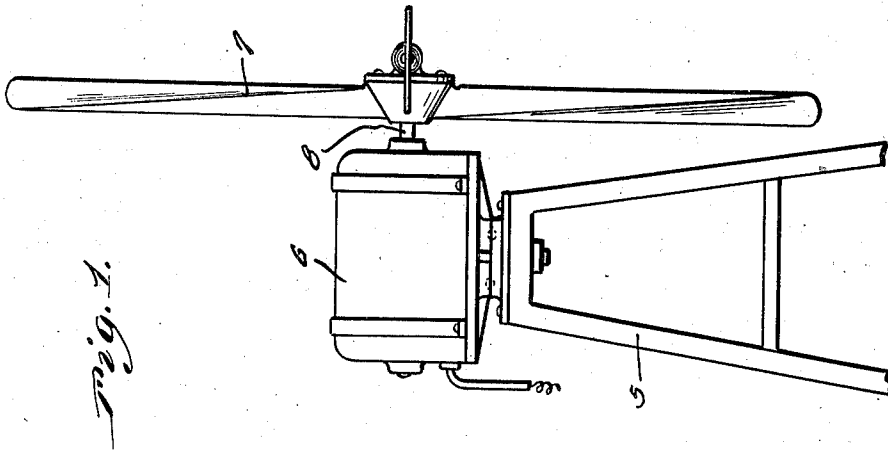
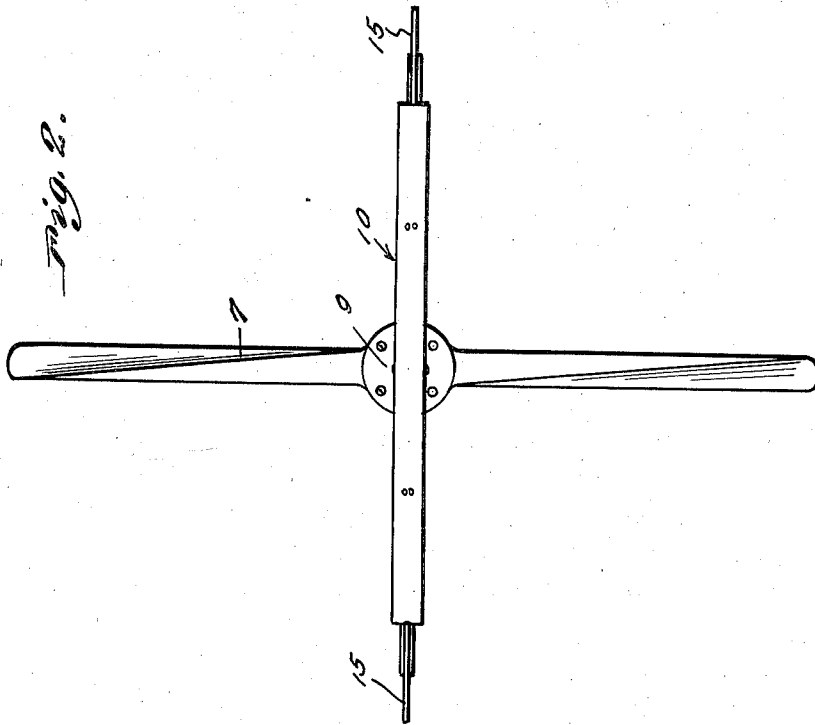
J. C. McCOLLY

2,126,202

GOVERNOR

Filed Sept. 28, 1937

2 Sheets-Sheet 1



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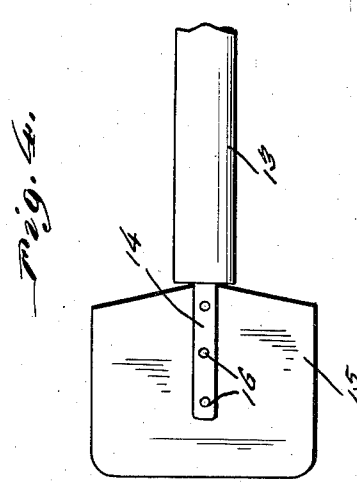
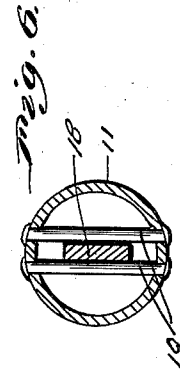
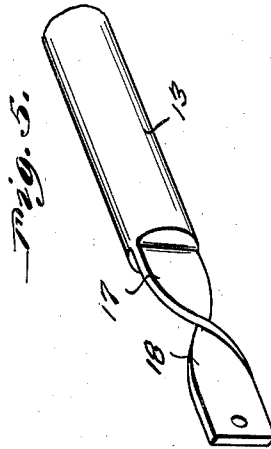
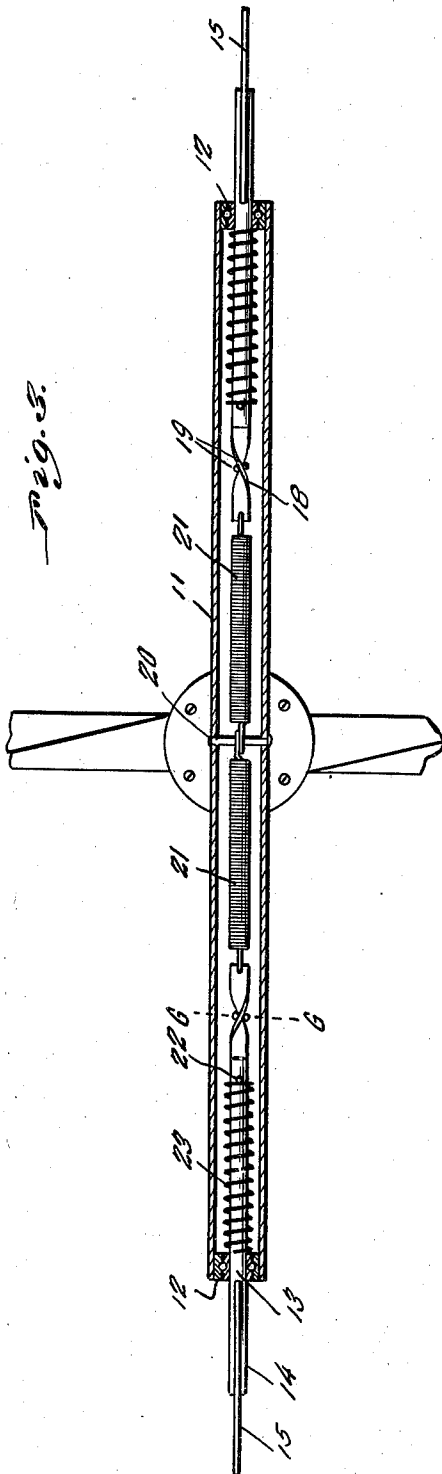
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GOVERNOR

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,126,202

GOVERNOR

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2 Claims. (Cl. 170—66)

This invention appertains to new and useful improvements in governors for wind motors such as windmills and the like.

The principal object of the invention is to provide a governor for automatically regulating the speed of the wind driven propeller.

Another important object of the invention is to provide a governor structure which will be simple-acting and substantially fool-proof.

Other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:—

Figure 1 represents a side elevational view of the assembly.

Fig. 2 is a front elevational view of the propeller and governor.

Fig. 3 is a fragmentary longitudinal sectional view showing the governor.

Fig. 4 is a fragmentary plan view of one of the weight members.

Fig. 5 is a fragmentary perspective view of one of the weight members.

Fig. 6 is a cross sectional view, taken substantially on the line 6—6 of Fig. 3.

Referring to the drawings, wherein like numerals designate like parts, it can be seen that numeral 5 denotes the usual skeleton tower for supporting the generator 6 which is driven by the wind propeller 7, the propeller being located on the shaft 8.

As is clearly shown in Fig. 2, the propeller 7 is provided with the hub 9 and to this hub is secured the governor mechanism generally referred to by numeral 10.

This governor mechanism consists of the elongated barrel 11 provided with ball bearing mounts 12 in the opposite ends thereof and through these ball bearing mounts are disposed the cylindrical-shaped weight members 13—13.

The outer ends of these weight members 13 are bifurcated as at 14 for receiving the broad paddle blades 15 which are secured to the bifurcated portion by suitable securing means 16.

The inner ends of these weight members 13 are reduced as denoted by numeral 17 and then twisted to a screw form 18. The barrel 11 adjacent each end thereof is provided with a pair of closely spaced pins 19—19 disposed there-through transversely and between each pair of pins 19—19 is disposed the adjacent screw form 18.

At the intermediate portion of the barrel 11 an anchoring pin 20 is located and from this pin in opposite directions extend the coiled extensible springs 21—21, each of which connects at its outer end to the adjacent end of the corresponding screw form 18 as is clearly shown in Fig. 3.

On the inner end portion of each of the weight

members 13, that is inwardly of its screw form 18, is located a stop pin 22 between which and the corresponding ball bearing mount 12 a coiled compressible spring 23 is located and in convoluting position on the corresponding weight member 13.

It can now be seen that as the barrel 11 is rotated by the propeller 7, and speed increases, the weight members 13 move outwardly due to centrifugal force and as they do so the same rotate due to the disposition of the screw forms 18 between the pins 19—19. This action causes rotation of the blade-like paddles 15 so that they will move or rotate from a position on a plane with the propeller 7 to the other extreme as shown in Figs. 1 and 2, that is at right angles to the plane of the propeller 7 and this, of course, acts as a retarding means for the propeller.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:—

1. Retarding means for rotary structures comprising a barrel secured to a rotary structure to project laterally therefrom, a shaft longitudinally disposed in the barrel and projecting at one end from the free end of the barrel and being slidably disposed therein, a paddle on the outer end of the shaft, said shaft provided with a spiral formation at its inner end, an anchor in the barrel, an extensible coiled spring in the barrel having one end connected to the anchor and its opposite end to the spiral formation, a coiled compressible spring on the shaft having one end connected to the inner end portion of the shaft and its outer end abutting the adjacent end portion of the barrel.

2. Retarding means for rotary structures comprising a barrel secured to a rotary structure to project laterally therefrom, a shaft longitudinally extending from the outer end of the barrel and journaledly supported therein, a paddle on the outer end of the shaft, said shaft being longitudinally slidable in response to centrifugal force, spring means for retracting the shaft when relieved of centrifugal force, and means for causing rotation of the shaft as it slides in the barrel, said means for causing rotation of the shaft consisting of a pair of closely spaced pin members disposed across the interior of the barrel, said means for causing rotation of the shaft further including a spiral formation on the inner end of the shaft slidably disposed between the pin members.

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