Jan. 28, 1941. G. SORENSEN 2,229,681

GOVERNOR

Original Filed May 14, 1936 2 Sheets-Sheet 1

Fig. 1

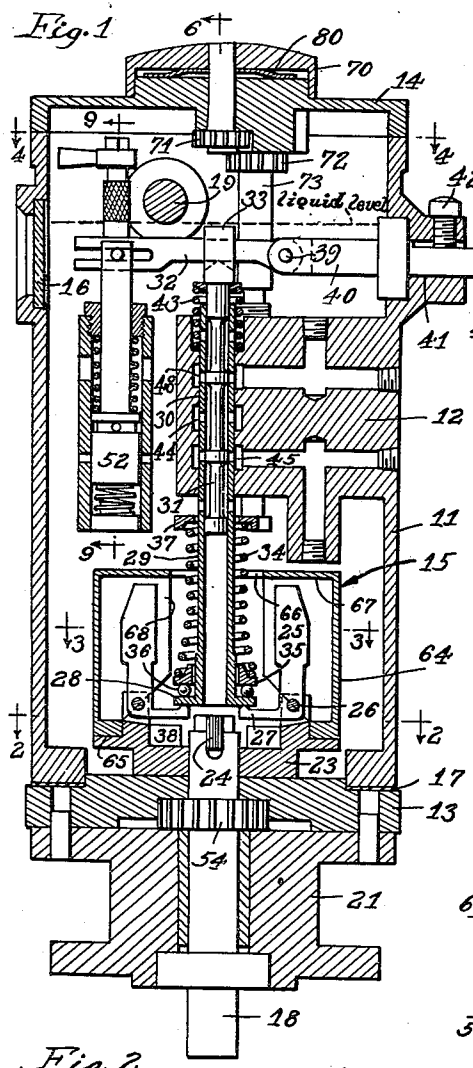


Fig. 5

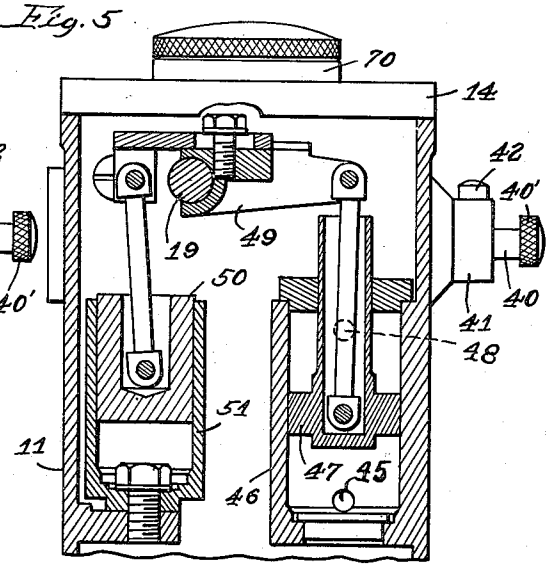


Fig. 4

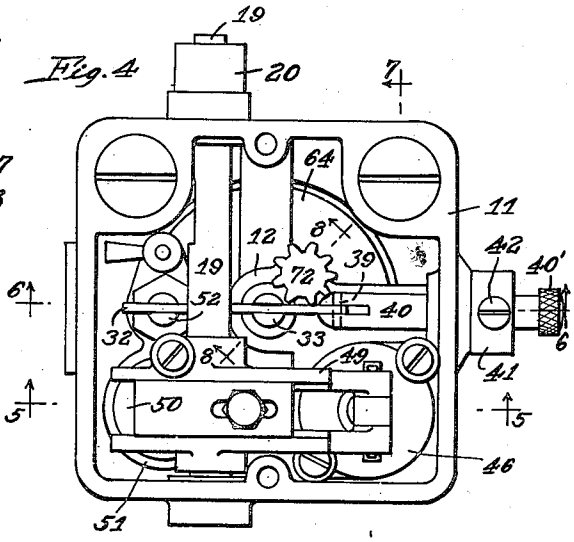


Fig. 2

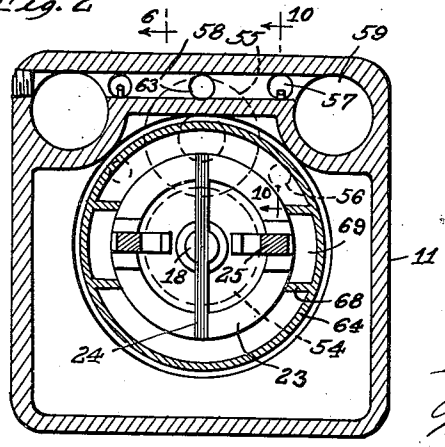
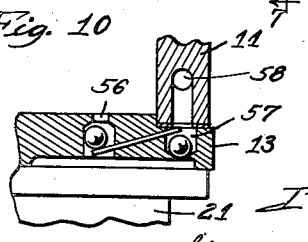


Fig. 10



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GOVERNOR

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Fig. 6

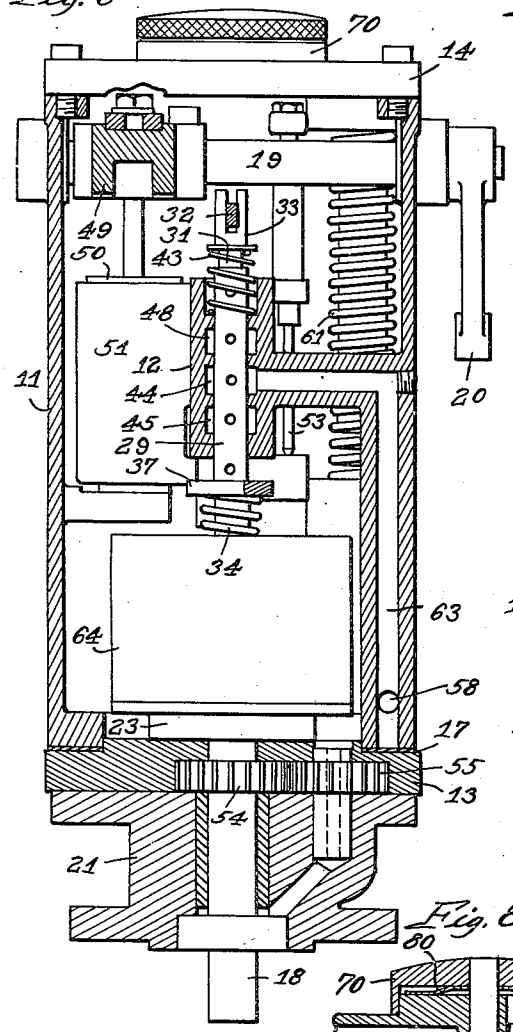


Fig. 7

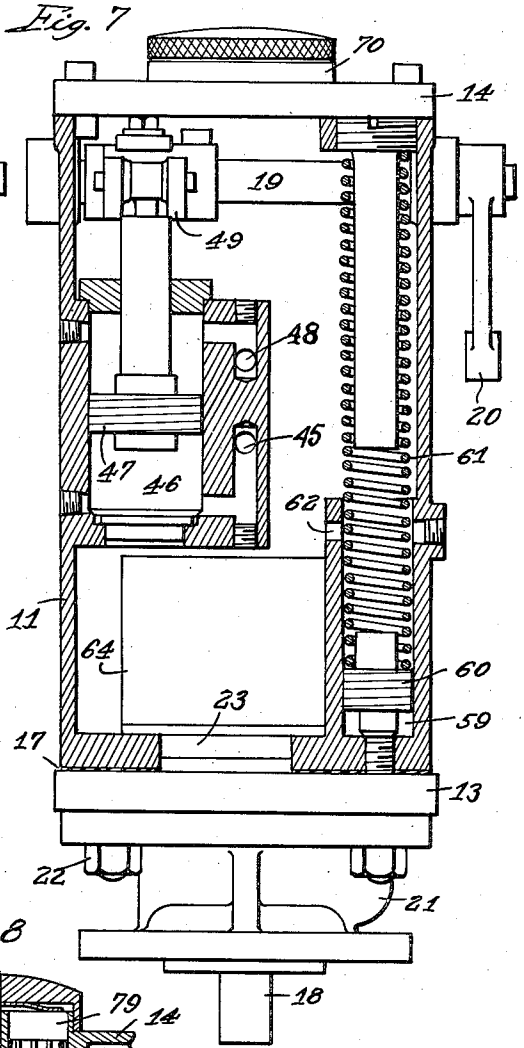


Fig. 8

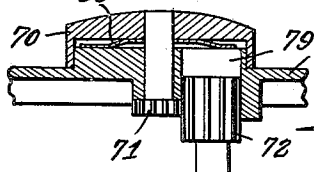
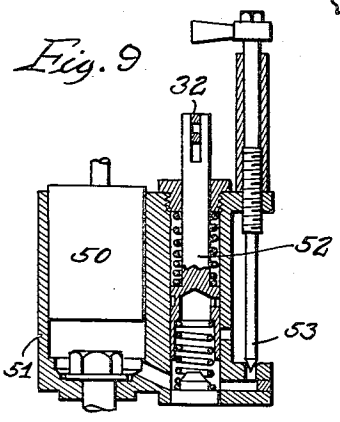


Fig. 9



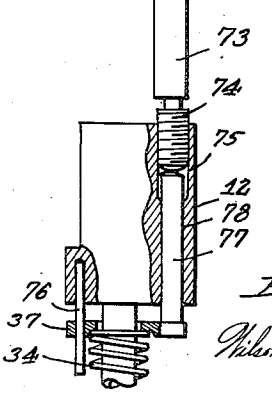
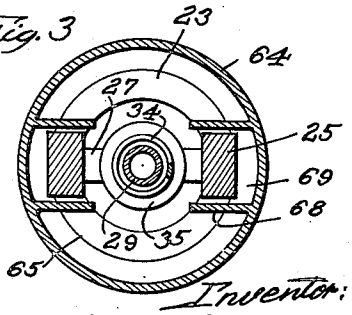


Fig. 3



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UNITED STATES PATENT OFFICE

2,229,681

GOVERNOR

George Sorensen, Rockford, Ill., assignor to Woodward Governor Company, Rockford, Ill., a corporation of Illinois

Application May 14, 1936, Serial No. 79,671
Renewed May 8, 1939

17 Claims. (Cl. 264—14)

This invention relates to governors.

The principal object of my invention is to provide a governor in which the radial movement of the flyballs or fly-weights is dampened by dashpot action to eliminate objectionable fluttering to and fro of the pilot valve, and accordingly produce smoother operation. This vibratory motion of the flyballs was due to their response to power impulses of the prime mover being governed. These impulses are cyclical, that is, they occur several times per revolution of the speeder head or engine crank-shaft, and their reaction upon the flyballs is easily eliminated by the dashpot action.

In the governor of my invention, the flyball or speeder mechanism is entirely submerged in oil and the flyball elements are enclosed in a casing turning with the speeder head, so that the damping oil revolves with the head and merely restrains the undesirable oscillation of the flyball elements.

The governor also embodies other features of novelty, as will be brought out in the following detailed description in which reference is made to the accompanying drawings, wherein—

Figure 1 is a central longitudinal section through a governor made in accordance with the invention;

Fig. 2 is a horizontal section on the line 2—2 of Fig. 1;

Fig. 3 is a horizontal section through the speeder mechanism taken on the line 3—3 of Fig. 1, clearly illustrating the relationship of the flyball elements to the dashpot chambers in the enclosing casing;

Fig. 4 is a plan view of the governor with the top cover removed, this view being on the line 4—4 of Fig. 1;

Figs. 5, 6, and 7 are sections through the governor taken in vertical planes on the correspondingly numbered lines of Fig. 4, Fig. 6 being also taken on the line 6—6 of Fig. 1;

Figs. 8 and 9 are fragmentary sectional views on the lines 8—8 and 9—9 of Figs. 4 and 1, respectively, and

Fig. 10 is a sectional detail on the line 10—10 of Fig. 2.

The same reference numerals are applied to corresponding parts throughout the views.

The governor of my invention comprises a main housing 11 having a valve chest 12 suitably cast integral with the wall thereof about half way between the bottom closure plate 13 and the cover 14. The speeder mechanism indicated generally by the numeral 15, with which my invention is particularly concerned, is located in the space beneath the valve chest 12 and is immersed in oil or any other fluid suitable for the present purposes, the oil being maintained at a level visible through the sight glass 16, as indicated by the liquid level line in Fig. 1. A gasket 17 is interposed between the bottom closure plate 13 and the housing 11 to prevent leakage of oil from the housing. The shaft 18 is suitably connected with the internal combustion engine or other prime mover whose operation is to be regulated by the governor, and, assuming it is an internal combustion engine, the shaft 19 which is turned in response to the governor serves to regulate the delivery of fuel to the engine, the arm 20 attached to the shaft outside the housing of the governor being connected with the throttle or the fuel pump inlet cam, depending upon the type of engine. The shaft 18 extends through a base 21 onto which the housing 11 is secured, as indicated at 22 (Fig. 7), with the bottom plate 13 clamped in place therebetween. The shaft 18 can be attached directly to the speeder head 23, although I have shown a resilient driving connection provided by a group of flat leaf springs 24 entered in the forked upper end of the shaft 18 and in slots provided in diametrically opposite sides of the speeder head 23. At 25 are indicated the flyball elements or flyweights pivoted at 26 on the head 23 and having arms 27 bearing directly against the flanged lower end 28 of the valve sleeve 29. The sleeve 29 has a close working fit in the longitudinal bore 30 in the valve chest 12, and rotates freely therein, the sleeve being caused to turn with the speeder head by reason of the frictional engagement of the arms 27 with the flange 28. The sleeve is ported for co-operation with the chambers and passages in the valve chest 12, on the one hand, and the pilot valve 31, on the other hand, the valve 31 being reciprocable in the sleeve 29 but held against turning therewith by the fulcrum lever 32 extending through its forked headed upper end 33. The fact that the sleeve 29 turns relative to the pilot valve 31 in the bore 30, makes for minimum friction and consequently easiest operation, so that the governor is most sensitive and will not "hunt" as it would otherwise if there were frictional drag between the valve and valve sleeve. This is, of course, very important and is one of the novel features of my governor. The easy operation is further insured by the fact that the entire sleeve is immersed in oil, the oil level in the housing 11 being kept to a point above the valve chest 12,

as previously described. The sleeve 29 is movable upwardly by the flyball elements 25 moving outwardly with increased speed of rotation. A coiled trumpet shaped compression spring 34 encircles the sleeve 29 and is arranged to move it in the opposite direction when the flyball elements move inwardly upon decrease in speed of rotation of the head 23. Now, it will be observed that the spring 34 transmits its thrust to the flange 28 of the sleeve 29 through a collar 35 and antifriction thrust bearing 36 so that the sleeve is free to turn with respect to the spring. A nonrotatable collar 37 forms an abutment for the upper end of the spring 34 and is arranged to be adjusted as hereinafter described to vary the spring pressure resisting upward movement of the valve sleeve 29. The extent of inward movement of the flyball elements 25 is limited by engagement of the arms 27 with the stops 38 provided on the head 23. The pilot valve 31 is movable downwardly by the fulcrum lever 32 which is pivoted at 39 on the adjustable bearing member 40 slidable endwise in the bearing 41 in the wall of the housing 11 and arranged to be clamped in adjusted position by the set screw 42. A coiled compression spring 43 acting between the chest 12 and head 33 on the upper end of the pilot valve 31 tends normally to move the valve in the opposite direction. Obviously, if the bearing rod 40 is moved to the right in Fig. 1, a given angular movement of lever 32 about its pivot 39 results in greater lineal movement of the pilot valve 31 than if the bearing rod 40 is adjusted to the left. This adjustment is one which is usually made at the time the governor is installed, and the set screw 42 is loosened and the bearing rod 40 is grasped by the knurled head 40' and moved in or out until stability is obtained, that is, until the governor ceases to "hunt." When the rod 40 has been properly adjusted, the set screw 42 is tightened. Now, since practically all of the rest of the governor is old in this art, no detailed description thereof is considered necessary, and it is therefore considered sufficient merely to identify the various parts generally in describing the operation of the governor, after which I shall describe in detail the flyball damping feature of my invention, and thereafter the novel speed adjustment operating upon the speeder spring collar 37.

In operation, the speeder head 23 is driven by the shaft 18 so that the flyball elements 25 in turning with the head will move radially outwardly under centrifugal force and accordingly transmit movement to the valve sleeve 29. 44 is the pressure chamber, so that if it is assumed that the sleeve 29 is moved upwardly due to an increase in speed of the prime mover, oil under pressure is delivered to the chamber 45 and thence to the bottom of the servomotor cylinder 46, thereby forcing the power piston 47 upwardly, oil being at the same time discharged from the upper end of the cylinder 46 through chamber 48, which under the conditions described is in communication with the inside of the housing 11. The power piston 47 through its connection with the rocker beam 49 oscillates the fuel shaft 19 to cut down fuel delivery to the engine. The compensating piston 50 which is also connected with the beam 49 is thereby moved downwardly in the cylinder 51, thus forcing the spring-balanced piston 52 upwardly against the action of its upper spring, whereby to move the pilot valve 31 upwardly by means of its actuating lever 32. In that way the ports in the sleeve 29 which were previously uncovered are again covered, thereby stopping any further movement of the power piston 47 and halting the movement of the fuel shaft 19 toward any further slowing down of the engine. Now, the flyball elements 25, as a result of the slowing down of the speeder head 23 with the engine, move inwardly under the action of the spring 34, and the valve sleeve 29 is accordingly moved downwardly. However, the ports in the sleeve are not uncovered, because the pilot valve 31 is at the same time being moved downwardly as the piston 52 stabilizes itself by downward movement under the action of its upper spring. The piston 52 can move downwardly only as fast as the oil displaced by the piston is allowed to escape past the bleeder valve 53. Thus the engine is returned to normal speed with the fuel shaft 19 in a new position, delivering less fuel to the engine, sufficient to maintain the speed under the decreased load condition. Should the load thereafter be increased, resulting in inward movement of the flyball elements 25 and accordingly in downward movement of the sleeve 29, the power piston 47 under those conditions is moved downwardly under pressure of fluid from chamber 48 which is placed in communication with the pressure chamber 44. This downward movement of the piston 47 results in turning of the fuel shaft 19 to increase the fuel delivery to the engine in order to maintain normal speed. The compensating piston 50 is moved upwardly and this results in downward movement of the spring-balanced piston 52 against the action of its lower spring, thereby moving the lever 32 downwardly and the pilot valve 31 with it. The ports in the sleeve 29 are thereby covered and there can then be no further movement of the power piston 47, thus halting further movement of the fuel shaft 19 toward any further increase in fuel delivery to the engine. The increase in speed of the engine resulting from the increase in fuel feed is reflected in outward movement of the flyball elements 25 so that the valve sleeve 29 moves upwardly. The pilot valve 31, however, moves upwardly at the same time so that the ports in the sleeve are not uncovered. The upward movement of the pilot valve is due to the action of the lower spring on the piston 52, which spring was previously compressed and in its expansion to normal condition moves the piston 52 upwardly, thereby raising the lever 32 and allowing the valve 31 to be moved upwardly under the action of the spring 43. The bleeder valve 53 regulates the intake of oil from the housing 11 and accordingly regulates the upward movement of the piston 52.

In passing, it will be noticed that there is a gear 54 on the shaft 18 which meshes with another gear 55 in the bottom plate 13. These gears form a pump drawing oil from inside the housing 11 through a ball checked port 56 and discharging the oil under pressure through another ball checked port 57 into a passage 58 communicating at opposite ends with the accumulator cylinders 59 provided in the wall of the housing 11. Pistons 60 in these cylinders are normally forced downwardly under the action of coiled springs 61, but are forced upwardly by the oil until the oil is allowed to escape at 62. The bottoms of the two cylinders 59 communicate with a passage 63 extending to the pressure chamber 44, as shown in Fig. 6. In that way there is always sufficient oil available at substantially constant pressure for the actuation of the power piston 47.

Referring now more particularly to Figs. 1, 2

and 3, it will be seen that I have provided a cylindrical casing 64 mounted on the annular shoulder 65 of the speeder head 23, preferably with a press fit. The casing 64 has a circular opening 66 in the top wall 67 concentric with the head 23 to afford open communication between the housing 11 and the inside of the casing, since the casing is to remain filled with oil to provide the dashpot action in accordance with my invention. By virtue of the casing 64, the body of oil surrounding the flyball elements 25 is segregated from the main body of oil in the housing 11 and will revolve with the speeder head 23 and thus cannot interfere with the normal functioning of the speeder mechanism, while still, however, exerting a damper effect on the radial movement of the flyball elements so as to prevent vibration thereof in response to the power impulses of the engine. I may provide inwardly projecting walls 68 to shield the flyball elements 25 from side thrust of oil in the casing 64, assuming there is any relative rotation between the casing 64 and the parts therein with respect to the oil in the casing. However, I have found that the governor will perform satisfactorily if these walls 68 are omitted, which indicates that there is very little, if any, churning action of the flyball elements in the oil inside the casing 64. When these walls 68 are provided, they are disposed, as shown in Fig. 3, in parallelism on opposite sides of the flyball elements. These walls serve to define damping chambers 69 in which the flyball elements 25 operate with ample clearance, as shown. Inasmuch as the casing 64 is preferably cast as a die casting, the walls 68 can be provided easily as integral fins. Obviously, a more well defined damping action is secured with such a construction, although, as stated before, satisfactory damping action is obtainable without these walls at 68. Since the flyball elements 25 are kept from vibrating constantly in response to the cyclical power impulses of the engine, there is no longer any fluttering to and fro of the sleeve 29 relative to the pilot valve 31, and accordingly a smoother acting governor results.

In Fig. 8, I have shown how the collar 37 associated with the speeder spring 34 may be readily adjusted from the outside of the housing 11 by means of a knob 70 rotatable with respect to the cover 14. This knob has a pinion 71 attached thereto meshing with an elongated pinion 72 provided on the upper end of a stem 73, the lower end of which is threaded as at 74 in a hole 75 in the valve chest 12. The collar 37 is guided for up and down movement on a pin 76 projecting downwardly from the chest 12, as shown, and has a rod 77 extending upwardly therefrom at a point diametrically opposite the guide 76 and slidable in a guide 78 provided in the chest 12 in register with the hole 75. With this arrangement, the turning of the knob 70 results in up and down movement of the collar 37 to decrease or increase the pressure of the spring 34 and accordingly lower or raise the critical speed of the engine. The fact that the gear 72 is elongated, as shown, provides for meshing engagement with the pin 71 regardless of how far up or down the screw 74 is threaded. A hole 79 in the cover 14 provides a guide for the pinion 72 to keep the pinions 71—72 in proper meshing engagement in all conditions of adjustment. The leaf spring indicated at 80 inside the knob 70 exerts a frictional drag upon the turning of the knob, so as to hold the knob in adjusted position. The speed adjustment is therefore not apt to be accidentally changed.

It is believed the foregoing description conveys a good understanding of the objects and advantages of my invention. The appended claims are drawn with a view to covering all legitimate modifications and adaptations.

I claim:

1. In a flyball governor, a rotary flyball head having thereon flyball elements movable under centrifugal force, a fluid containing casing turning with said head and enclosing said flyball elements submerged in the fluid, and one or more fluid impellers within said casing revolving with said head.

2. In a flyball governor, a rotary flyball head having thereon flyball elements movable under centrifugal force, and a fluid containing casing turning with said head and enclosing said flyball elements submerged in the fluid, and walls inside said casing arranged to shield said flyball elements from side thrust incident to rotary propulsion of the fluid in the casing, said walls being arranged so as to cause revolution of the fluid as a body with the head and casing.

3. A governor as set forth in claim 2 wherein said walls are disposed in substantially parallel spaced relation and projecting inwardly from the side wall of the casing on opposite sides of the flyball elements, so that dashpot chambers are formed between said walls for operation therein of said flyball elements.

4. A governor as set forth in claim 2 wherein said walls are disposed in substantially parallel spaced relation and projecting inwardly from the side wall of the casing on opposite sides of the flyball elements, so that dashpot chambers are formed between said walls for operation therein of said flyball elements, the flyball elements having weighted portions movable in said chambers with more than a normal working clearance between the sides of said weighted portions and the adjacent inner sides of said walls.

5. In a governor, a housing containing working fluid, a rotary flyball head completely submerged in said fluid, said head having thereon flyball elements movable under centrifugal force, and a casing on said head entirely below the level of fluid in the housing and enclosing said flyball elements and having a central opening in the top thereof, whereby the elements are completely submerged in the fluid rotatable with the head and casing relative to the rest of the fluid in the housing.

6. In a governor, a housing containing working fluid, a rotary flyball head submerged in said fluid, said head having thereon flyball elements movable under centrifugal force, an open casing on said head enclosing said flyball elements, whereby the elements are submerged in some of the aforesaid fluid which is rotatable with the head and casing relative to the rest of the fluid in the housing, and one or more fluid impellers within said casing revolving with said head.

7. In a governor, a housing containing working fluid, a rotary flyball head submerged in said fluid, said head having thereon flyball elements movable under centrifugal force, and an open casing on said head enclosing said flyball elements, whereby the elements are submerged in some of the aforesaid fluid which is rotatable with the head and casing relative to the rest of the fluid in the housing, and walls inside said casing arranged to shield the flyball elements from side thrust incident to rotary propulsion of the fluid in the casing, said walls being arranged

so as to cause revolution of the segregated fluid in the casing with the flyball head.

8. In a flyball governor, a rotary flyball head having thereon flyball elements movable radially under centrifugal force, and liquid filled damping means wherein said elements have movement restrained solely by the inertia effect of the liquid when displaced by said elements, whereby to dampen vibratory movement thereof.

9. In combination, a centrifugal governor mechanism for a prime mover, a source of pressure fluid supply, a control cylinder containing a reciprocable regulator piston, a ported pilot valve sleeve arranged to be reciprocated by the governor mechanism to control the admission of fluid from said source to either end of said cylinder, a pilot valve reciprocable in the sleeve, a fulcrum lever operatively connected intermediate its ends with the pilot valve so as to permit endwise adjustment thereof transversely relative to said pilot valve, a compensating mechanism including a piston movable in proportion to the movement of the regulator piston and operatively connected with one end of said fulcrum lever to move the same and thereby move the pilot valve, a manually adjustable slidable member providing an adjustable pivotal support for the other end of the fulcrum lever, whereby to permit variation in the amount of movement of the pilot valve for a given movement of the regulator piston, and means for securing the slidable member in adjusted position.

10. In combination, a centrifugal governor mechanism for a prime mover, a source of pressure fluid supply, a control cylinder containing a reciprocable regulator piston, a ported pilot valve sleeve and pilot valve therein arranged to be reciprocated relative to one another to control the admission of fluid from said source to either end of said cylinder, a fulcrum lever operatively connected with one of said sleeve and valve elements to reciprocate the same but so as to permit endwise adustment thereof transversely relative to the element to which it is operatively connected, the governor mechanism being operaitvely connected with the other of said sleeve and valve elements to reciprocate the same, a compensating mechanism including a piston movable in proportion to the movement of the regulator piston and operatively connected with one end of said fulcrum lever to move the same and thereby move the valve element connected therewith, a manually adjustable slidable member providing an adustable pivotal support for the other end of the fulcrum lever, whereby to permit variation in the amount of movement of the valve element for a given movement of the regulator piston, and means for securing said slidable member in adusted position.

11. In a governor, the combination of a valve chest, a ported valve sleeve slidable and rotatable therein, a pilot valve slidable within said sleeve, the pilot valve and sleeve extending in opposite directions from said chest, a centrifugal governor mechanism for a prime mover, a source of pressure fluid supply, a control cylinder containing a reciprocable regulator piston, said sleeve being rotatable with the governor mechanism and arranged to be reciprocated thereby to control the admission of fluid from said source to either end of said cylinder, a fulcrum lever operatively connected with the pilot valve to hold the same against turning in said sleeve and also cause reciprocatory movement thereof, compensating mechanism including a piston movable in proportion to the movement of the regulator piston and operatively connected with one end of the fulcrum lever, and means providing pivotal support for the other end of said lever, the fulcrum lever, during operation, being slidably adjustable endwise transversely relative to the pilot valve and the piston of the compensating mechanism, and the last-mentioned means comprising a movable member adjustable manually so as to adjust the pivot for said lever and adjust the lever relative to the valve and piston associated therewith.

12. In a governor, the combination of a valve chest, a ported valve sleeve slidable and rotatable therein, a pilot valve slidable within said sleeve, the pilot valve extending upwardly out of said chest and the valve sleeve extending downwardly out of said chest, a flyball head rotatable beneath said chest and having flyball elements movable radially under centrifugal force, said elements engaging the sleeve to communicate upward movement thereto and also cause rotation thereof with the flyball head, a restraining spring normally urging the sleeve downwardly and the flyball elements inwardly, a fulcrum lever operatively connected with the pilot valve above the valve chest, said lever serving to communicate movement to the pilot valve and also hold the same against turning, a restoring mechanism for communicating movement to said lever, the restraining spring being a coiled compression spring surrounding the sleeve beneath the valve chest, a collar substantially concentric with the sleeve and abutting the upper end of the spring to hold the same under compression, guide members on diametrically opposite sides of said collar acting between the collar and the valve chest to guide the collar for axial movement to increase or decrease the compression of said spring, a stationary support above the valve chest, a manually rotatable adjusting knot rotatably mounted thereon, and a member threaded in the valve chest and serving to communicate endwise movement to one of the guide members and thereby move the collar axially, said threaded member having a sliding operating connection with the adjusting knob.

13. In a governor, the combination of a valve chest, a ported valve sleeve slidable and rotatable therein, a pilot valve slidable within said sleeve, the pilot valve extending upwardly out of said chest and the valve sleeve extending downwardly out of said chest, a flyball head rotatable beneath said chest and having flyball elements movable radially under centrifugal force, said elements engaging the sleeve to communicate upward movement thereto and also cause rotation thereof with the flyball head, a restraining spring normally urging the sleeve downwardly and the flyball elements inwardly, a fulcrum lever operatively connected with the pilot valve above the valve chest, said lever serving to communicate movement to the pilot valve and also hold the same against turning, a restoring mechanism for communicating movement to said lever, the restraining spring being a coiled compression spring surrounding the sleeve beneath the valve chest, a collar substantially concentric with the sleeve and abutting the upper end of the spring to hold the same under compression, guide members on diametrically opposite sides of said collar acting between the collar and the valve chest to guide the collar for axial movement to increase or decrease the compression of said spring, a stationary support above the valve chest, a manually rotat-

able adjusting knob rotatably mounted thereon, a member threaded in the valve chest and serving to communicate endwise movement to one of the guide members and thereby move the collar axially, said threaded member having a sliding operating connection with the adjusting knob, said connection including a pinion turning with the knob and another pinion meshing therewith and turning with the threaded member, one of the pinions being elongated to maintain meshing relation between the pinions in different positions of adjustment of the threaded member, and a guide for the pinion on the threaded member provided on said stationary support.

14. In a governor, a housing, a rotary flyball head having thereon flyball elements movable outwardly under centrifugal force, a casing for said head comprising a circular side wall in concentric relation with the head enclosing said flyball elements and a top wall extending over said head to further enclose said flyball elements, said top wall having a central opening provided therein, a ported pilot valve sleeve, a pilot valve in said sleeve, said sleeve and valve being reciprocable vertically relative to one another to control fluid flow to a control cylinder containing a reciprocable regulator piston, one of said sleeve and valve elements extending through the central opening in the top wall over said head and being operatively connected at its lower end with the flyball elements, whereby endwise movement is transmitted thereto in one direction when the flyball elements move outwardly under centrifugal force, and a coiled spring also extending through said central opening and surrounding the aforesaid element and acting to move the same in the opposite direction, said housing containing working fluid to a level above the top wall of the casing of the flyball head.

15. In combination, a centrifugal governor mechanism for a prime mover, a source of pressure fluid supply, a control cylinder containing a reciprocable regulator piston, a pilot valve mechanism to control the admission of fluid from said source to either end of said cylinder, said pilot valve mechanism including a reciprocable ported sleeve element and a plunger element reciprocable in said sleeve element, a lever operatively connected intermediate its ends to one of said pilot valve elements so as to permit endwise adjustment thereof transversely relative to said pilot valve, the other of said pilot valve elements being operatively connected to said governor mechanism to control the flow of fluid to said cylinder in response to the movement of said governor, a compensating mechanism including a piston movable in proportion to the movement of the regulator piston and operatively connected with one end portion of said lever to move the same and thereby move said one pilot valve element, a manually adjustable slidable member providing an adjustable pivoted support for the other end portion of the lever, whereby to permit variation in the amount of movement of said one valve element for a given movement of the regulator piston, and means for securing the slidable member in adjusted position.

16. In a flyball governor, a rotary flyball head having thereon flyball elements movable radially under centrifugal force, a ported sleeve rotatable with said head and shifted axially by said elements in response to speed changes detected thereby, a plunger within said sleeve and shiftable axially relative thereto, a compression spring coiled around said sleeve, a thrust bearing between one end of said spring and said sleeve permitting rotation of the sleeve while said spring is held against rotation, manually operable adjusting mechanism connected to the opposite end of said spring to adjust the stress thereof, and automatic mechanism operable in response to speed changes to change the axial position of said plunger.

17. In a flyball governor, a rotary flyball head having thereon flyball elements movable radially under centrifugal force, a rotatable sleeve coupled at one end to said head for rotation in unison therewith and shiftable axially by said elements in response to speed changes detected thereby, ports in the other end portion of said sleeve, a non-rotatable plunger within the ported portion of said sleeve coacting therewith to define a fluid control valve responsive to axial movement of said sleeve, a compression spring coiled around said sleeve intermediate the ends thereof and acting at one end against said flyball elements to resist outward movement thereof, and non-rotatable adjusting mechanism associated with the opposite end of said spring and adjustable while said head is rotating to vary the stress of said spring and therefore the speed setting of the governor.

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