

IDE *V.* BALL ENGINE CO. *ET AL.*

*Circuit Court, N. D. Illinois.*

July 22, 1889.

PATENTS FOR INVENTIONS—INVENTION—STEAM-ENGINE GOVERNORS.

Letters patent No 301,720, granted July 8, 1884, to Albert L. Ide, for a “steam-engine governor,” describe, “in a fly-wheel governor, the combination, with relatively movable parts, of a dash-pot. “Governors similar in arrangement of parts with dash-pots were used as early as 1880 and 1881 in Brooklyn, and Thompsonville, Conn., but they were attached to the driving shafts, instead of to the fly-wheel, as described in the patent. *Held* that, as no new function was obtained by combining the governor and the fly-wheel, the change did not involve invention, and that the patent was void.

In Equity. Bill for injunction and accounting.

*Offield & Towle*, for complainant.

*J. K. Halleck* and *J. H. Raymond*, for defendants.

BLODGETT, J. This is a bill in equity for an injunction and accounting, by reason Of the alleged infringement by defendants of letters patent No. 301,720, granted July 8, 1884, to the complainant for a “steam-engine governor.” The nature and scope of the invention covered by this patent and described by the patentee in his specifications as follows:

“This invention relates to that class of steam-engine governors known as ‘fly-wheel gov-ernors,’ and has for its primary object to provide means for holding the eccentric steadily in its proper poised position, in opposition to the tendency of certain extraneous forces which are calculated to disturb the movements of the valve, as sought to be determined by the balanced forces of weights and Springs when the engine is in motion. To this end the invention consists in the combination of a dash-pot with the governor and pulley, said dash-pot connected with a fixed and movable part, or with two relatively or unequally movable parts; as, for example, with the extremity of a weight, lever, and the pulley hub. In this class of governors the position of the eccentric is variably determined by the op-posing and self-balancing forces exerted by the centripetally acting spring or springs, and the centrifugally acting weight or weights connected with said springs; the intention being to hold the eccentric permanently in a certain poised position for a given speed of the wheel to which the governor is applied, and to vary the position of the eccentric exactly as the speed of said wheel is varied. There are, however, certain temporarily acting causes of disturbance calculated to change the position of the eccentric independently of the speed of the wheel. The principal

of these disturbing causes is the inertia of the reciprocating parts, including the eccentric and the parts actuated thereby; and a secondary cause is the gravity of the eccentric when not counter-balanced by some special device for the purpose. At a regular and very high speed of the governor wheel or pulley, these disturbing forces operate but slightly, owing to the momentum of the weights, which serve to prevent their deflection from a regular course; but at lower speeds than that at which the apparatus is adjusted to run, and particularly in accelerating or retarding the engine, as in starting up or slowing down, these incidental disturbing forces interfere materially with the valve action, and give an objectionable irregularity to the movements of the weights. In the case of an engine used for running a dynamo for electric lighting purposes, and subject to sudden and wide changes in requisition of power and speed, the effects of the disturbance referred to manifest themselves also in the quality or intensity of the lights. A dash-pot constructed and attached to the apparatus in such manner as to prevent sudden movements of the weight levers or of the eccentric is found in practice to wholly overcome the defects indicated, and to give a desirable steadiness and regularity to the movements of the movable parts of the governor, as well as accuracy and reliability to the cut-off action of the valve. \* \* \* The cylinder of the dash-pot is filled with glycerine, or some other non-compressible liquid, preferably one that is also not congealable at a temperature to which the engine is likely to be exposed. By means of the dash-pot applied to the relatively movable and stationary parts or to the unequally moving parts, as described, wide and sudden radial movements of the weights, E, are prevented, and as a consequence the governor will have a steady and efficient action at all speeds of the pulley or wheel to which said governor is applied. \* \* \* By the term 'dash-pot' in the appended claim I mean the device technically known by that name,—usually comprising a close cylinder, a piston having a passage through or around it, and a fluid confined in the cylinder, as shown, or its equivalent.”

The patent has but one claim, which is:

“In a fly-wheel governor, the combination, with relatively movable parts, of a dash-pot, substantially as described.”

The proof shows, without dispute, that as early as 1880, the Buckeye Manufacturing Company of Salem, Ohio, placed upon the driving shaft of their engines governors with weighted arms arranged to swing centrifugally, as the shaft revolved, so as to act upon the eccentric, and kept from swinging too readily by centripetal springs,—the arrangement and function of the movable and fixed parts of the governor being substantially like the movable and fixed parts of the Ide governor, except that it had no dash-pot; the operative parts being held in place upon the shaft of the engine within a comparatively light shell or case, with radial arms extending from the shaft. One of these Buckeye engines was placed in what was known as the “Pacific Elevator,” or Dow’s stores, in Brooklyn, in the state of New York, and its governor not securing such steadiness of motion in the engine

as was desired, a dash-pot, in December, 1880, was put into the governor in substantially the manner shown by the defendant's Exhibit B, in evidence in this case; the dash-pot in Exhibit B being attached to one of the swinging arms of the governor, and to a fixed part, so that its operation was essentially the same as that of the dash-pot in the complainant's patent. In July, 1881, governors similar in arrangement of parts and with dash-pots were put into the engines of the

Hartford Carpet Company at Thompsonville, Conn., and the engine of the Hartford Manilla Company at Burnside, Conn., and these governors, with dash-pots attached, had continued in use on these engines up to the time the proofs were taken in this case, and all had proved effective in securing steadiness of action in the engines to which they were attached, or, as the witnesses expressed it, preventing sudden and violent fluctuations of the governor. : ‘ The dash-pots attached to these Buckeye governors were connected with a movable and fixed part of the governor in such a manner as to be accurately described by the specifications of complainant’s patent. In other words, the structure of these Buckeye governors, with the dash-pot added, was such as to make them a manifest and palpable infringement of the complainant’s patent if they had been made and used after, instead of before, that patent. The only feature in which these Buckeye governors, with the dash-pot added, can be differentiated from the complainant’s patent, is that they were not placed in the fly-wheel of the engines to which they were attached. Mr. Ide has taken this Brooklyn and Thompsonville governor out of the shell or disk in which it was placed by the agents of the Buckeye Company on the shaft, and attached it to the hub and radial arms of the fly-wheel of his engine, and the claim of his patent is for putting this governor, with dash-pot, into the fly-wheel of the engine. The most he has done has been to fasten this old Brooklyn and Thompsonville governor to the arms of the fly or balance wheel of his engine, instead of leaving it on the driving shaft, where he found it; and the only question is, has he invented anything in doing this? I do not learn from the proof that any new function is obtained by the combination covered by this claim. The governor still performs the same function, and no other, that it did when fastened to the shaft by the shell and arms, as in the Brooklyn and Thompsonville governors; and the fly-wheel still performs the functions it did before the governor was brought into it. Their joint operation, when combined, is the sum, and only that, of their separate operation in the older machines. The patent, therefore, seems to me to come clearly within the rule in *Reckendorfer v. Faber*, 92 U. S. 354, and *Pickering v. McCullough*, 104 U. S. 310. It is true there may be some convenience in bringing these parts together and making a more compact machine, but that is a mere mechanical change, which does not rise into the realm of invention. As was said by Mr. Justice Matthews in the case last cited: “In the patentable combinations of old elements, all the constituents must so enter into it as that each qualifies every other. \* \* \* It must form either a new machine of a distinct character and function, or produce a result due to the joint co-operating action of all the elements. It is not a mere adding together of separate contributions.”

For these reasons I am of opinion that the patent is not valid, and that the bill should be dismissed for want of equity.