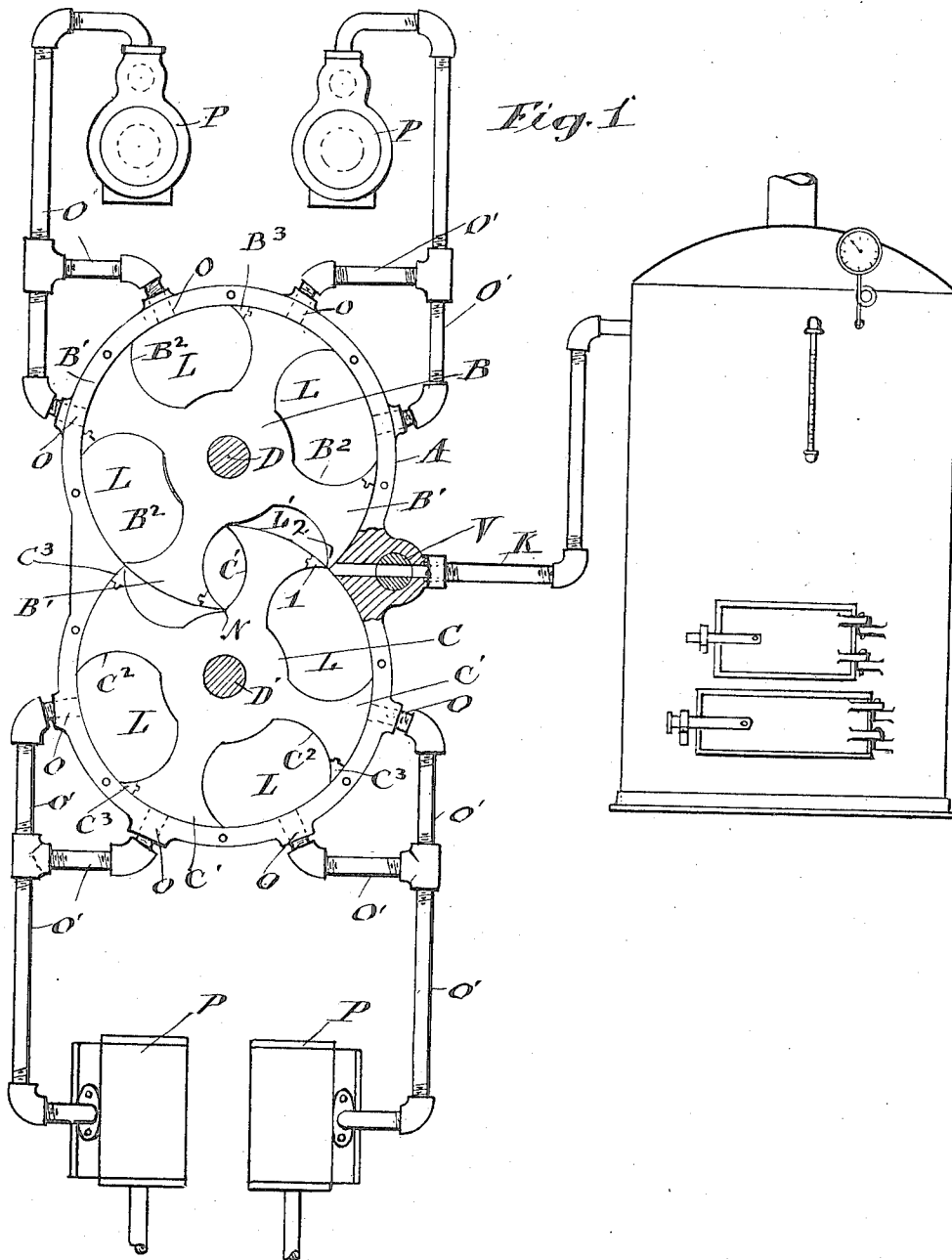


S. T. LESTAK,
MOTOR AND PRESSURE DISTRIBUTER.
APPLICATION FILED JULY 20, 1914.

1,207,306.

Patented Dec. 5, 1916.
2 SHEETS—SHEET 1.



WITNESSES:

P. Bredeh
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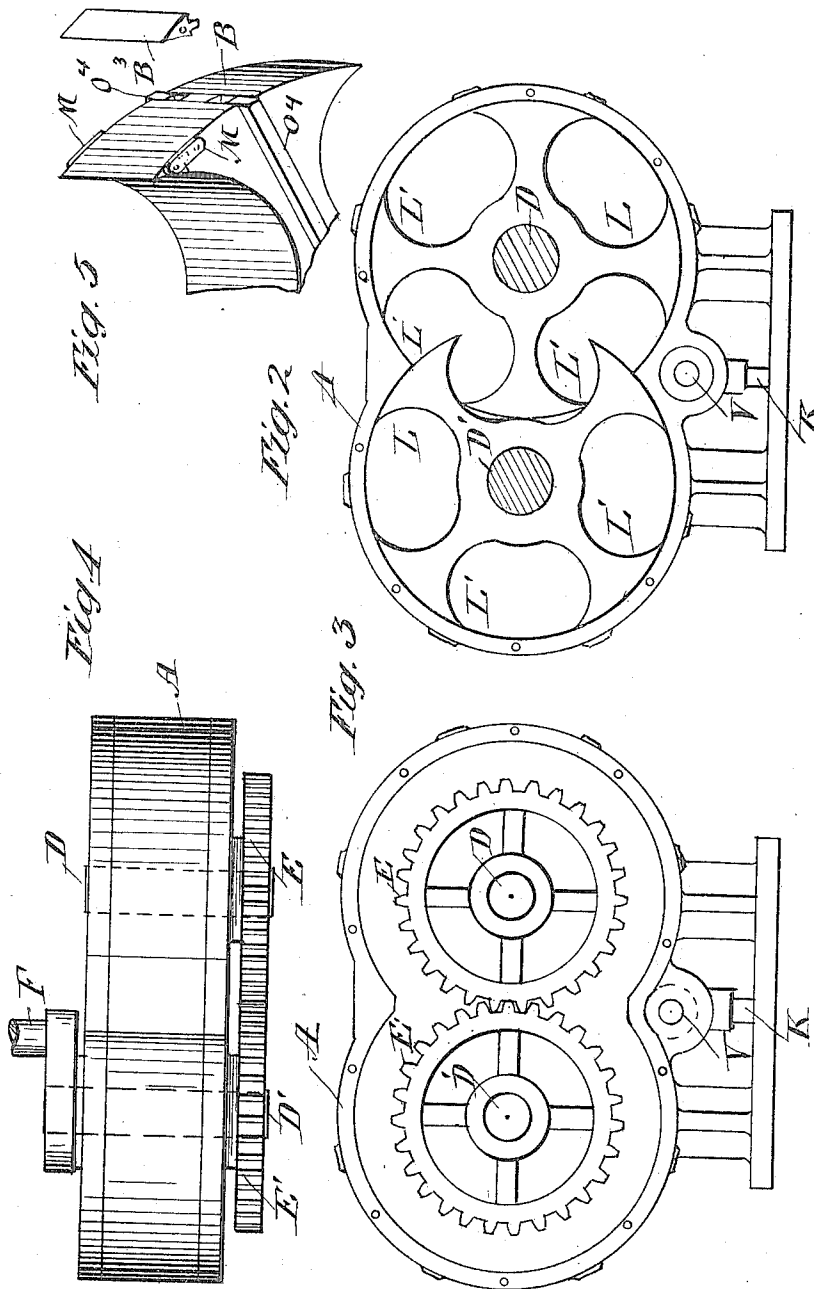
INVENTOR.

BY *Steven T. Lestak*
Wm. M. Monroe
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UNITED STATES PATENT OFFICE.

STEVEN T. LESTAK, OF EAST BAKERSFIELD, CALIFORNIA.

MOTOR AND PRESSURE-DISTRIBUTER.

1,207,306.

Specification of Letters Patent.

Patented Dec. 5, 1916.

Application filed July 20, 1914. Serial No. 852,062.

To all whom it may concern:

Be it known that I, STEVEN T. LESTAK, a citizen of the United States, and resident of East Bakersfield, in the county of Kern and State of California, have invented certain new and useful Improvements in Steam or Air Motors and Pressure-Distributers, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The objects of the invention are to provide means for developing power from steam, air, or other gaseous or fluid pressure and for applying it at any desired point of use.

The invention comprises a motor driven by means of the pressure described, applied internally thereto, and also having the function of distributing the pressure to operate other engines at predetermined localities.

The invention further comprises a rotary motor having blades which cooperate to form traveling chambers which carry the steam or other pressure producing element to exhaust openings from which the exhaust is distributed to be applied to other motors or engines in specified positions, for convenient use.

The invention further comprises the combination and arrangement of parts and construction of details hereinafter described, shown in the accompanying drawings and specifically pointed out in the claim.

In the accompanying drawings Figure 1 is a transverse section showing the combined motor and distributor and the manner of connecting the same with the source of pressure shown in this instance to be a steam generator or boiler; Fig. 2 is a similar section showing the paddles in another position; Fig. 3 is an exterior elevation of the motor and distributor; Fig. 4 is an edge view thereof; Fig. 5 is an enlarged elevation of one of the motor blades showing an adjustable point upon the bearing edge which engages the opposing paddle blade.

In these views A is a casing in which are rotatably secured the paddle wheels B and C. These paddle wheels are provided with interengaging blades B' and C' respectively, and the blades are provided with inwardly curved sides B², C² and points B³, C³ respectively. The points of the paddles on one wheel closely engage the curved sides

of the opposing wheel as the wheels revolve, and form substantially air and steam tight joints therewith, and also form substantially air and steam tight chambers, of which the casing wall forms one side as the paddles revolve in the casing. A spring pressed feather O⁴ on each side of each blade makes the joints tight.

As the paddles revolve within the casing the chamber inclosed between adjoining paddles retains the compressed air or steam under pressure and conveys it to one or more exhaust openings O, O', through which it is discharged into pipes O' O' and is conveyed to an engine or engines P, P positioned at any desired points. The paddle wheel shafts D, D' are geared together at E, E' so as to move in unison and utilize all the power, and upon one of the shafts is positioned a crank F or other driving means, by means of which power can be obtained for any purpose, as for compressing air and storing it for further use in the same or other motors.

In the figures each paddle wheel is shown to have four paddles. In Fig. 1 the starting position is shown. Here the point 1 of one of the lower paddles is placed centrally of the inlet pipe K through which compressed air or steam enters the casing, and the point 2 of the adjacent paddle on the opposite wheel is just leaving it. A chamber L is then filled and put under pressure and revolves the lower wheel until the upper wheel has revolved to the position shown in Fig. 2, when the pressure is received upon one of the upper paddles and a chamber L' is formed filled with the pressure and the upper paddle wheel receives the pressure. There will always be three revolving chambers filled with pressure and conveying it to the several exhaust openings until the edge of one paddle or blade of one wheel just commences to engage the corresponding blade of the other wheel as shown in Fig. 1. This first point of engagement will always occur on a direct line connecting the center of the two shafts, as at N, Fig. 1.

In the arrangement shown in Fig. 1 a valve V can remain open between the motor and source of supply as long as the motor is running. This valve however can be geared to open and close periodically if desired, that is to open when the blades are in the positions shown in Fig. 1 and to close

when in the position shown in Fig. 2. One point that is the one in advance on each blade can be pivoted to the blade or connected by a link M so as to insure a perfect contact with the surface of the engaging blade. The pressure will then maintain the engagement.

The piping from the exhaust should be so connected as to obtain the greatest efficiency from the pressure stored in the chambers and which must be obtained from each chamber before the several paddles commence to engage with each other on the center line between the wheels. For this reason two exhaust openings can be piped to unite in one pipe leading to one engine and to obtain the same amount of pressure for any one engine exhaust ports which are similarly positioned in the two portions of the casing, as adjacent ports O, O, and pipes O', O' in Fig. 1 can unite to furnish pressure to that engine.

Among the advantages found in the use of this engine is that when the blades are forced out of any one chamber the pressure will not follow but will remain in the chamber and will revolve with the same until used for other purposes.

Before the chambers have revolved to the point of being again filled with live steam or air under pressure, they will have a num-

ber of opportunities to exhaust according to the number of exhaust openings used.

Having described the invention what I claim as new and desire to secure by Letters Patent is:

In a combined motor and pressure distributor, a pair of rotatable wheels and shafts, said wheels being provided with inter-engaging blades, making constant contact with each other, a casing surrounding said wheels having means for making air tight joints between said blades to form chambers between the blades, a series of separate pressure driven engines supplied from said casing, and exhaust pipes connecting said casing with said engines, each of said exhaust pipes being connected with a single one of said separate engines at one end and being branched at the other end and both branches of each side connecting with a portion of said casing which is associated with a single one of said wheels at separated points around the periphery thereof.

In testimony whereof, I hereunto set my hand this 8th day of June 1914.

STEVEN T. LESTAK.

In presence of—

L. S. HARMAN,
DELLA SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."