

No. 817,630.

PATENTED APR. 10, 1906.

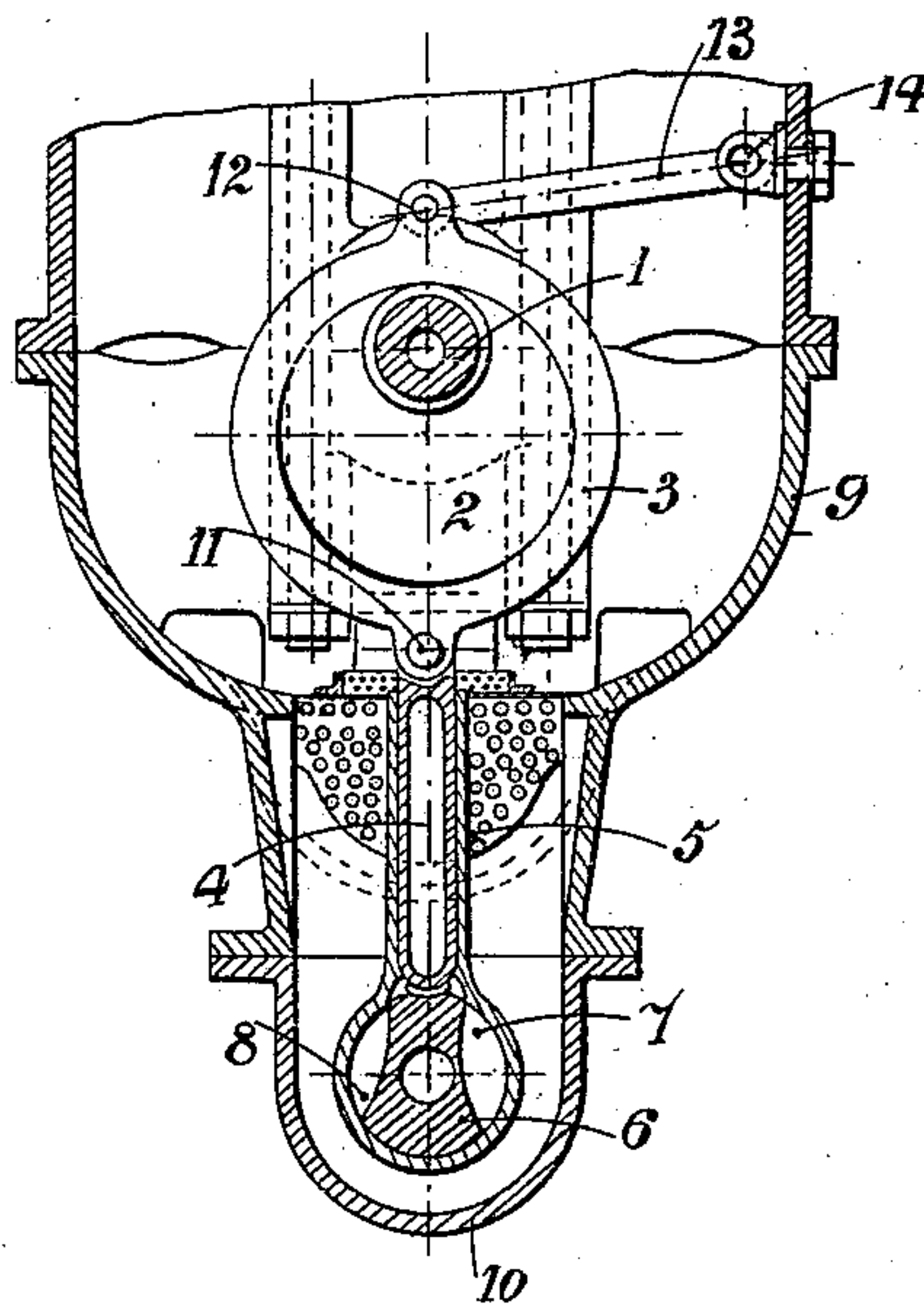
L. M. G. DELAUNAY-BELLEVILLE.

OIL PUMP.

APPLICATION FILED JUNE 26, 1905.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:

*W. B. Keeler*  
*C. D. Kessler*

Inventor

*Louis M. G. Delaunay-Belleville*

By

*James L. Norris*

*Att'y*

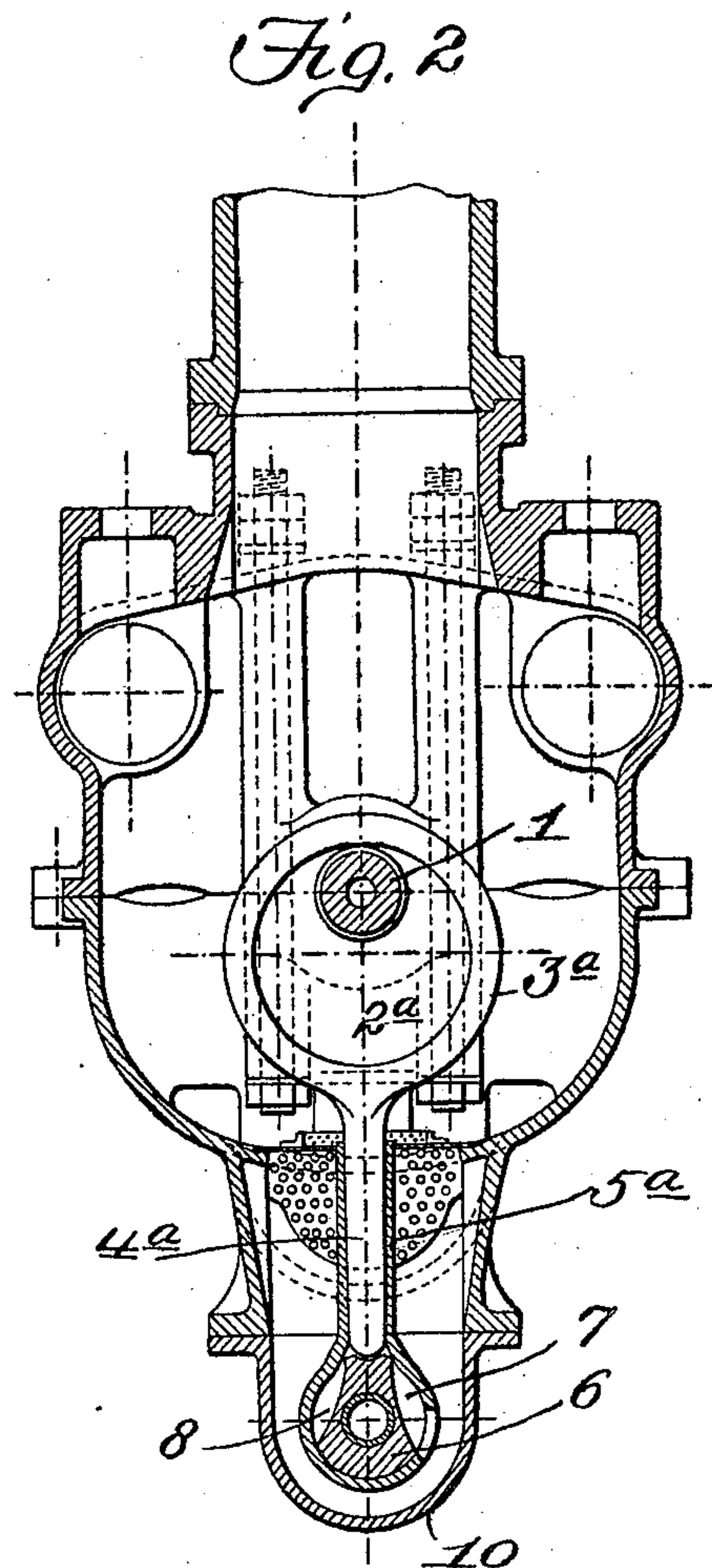
No. 817,630.

PATENTED APR. 10, 1906.

L. M. G. DELAUNAY-BELLEVILLE.  
OIL PUMP.

APPLICATION FILED JUNE 26, 1905.

2 SHEETS—SHEET 2.



*Witnesses:*  
*N. L. Bogan*  
*C. D. Kessler*

*Inventor*  
*Louis M. G. Delaunay-Belleville*  
*By*  
*James L. Norrie*  
*Atty.*



# UNITED STATES PATENT OFFICE.

LOUIS MARIE GABRIEL DELAUNAY-BELLEVILLE, OF NEUILLY-SUR-SEINE,  
FRANCE.

## OIL-PUMP.

No. 817,630.

Specification of Letters Patent.

Patented April 10, 1906.

Original application filed February 9, 1905, Serial No. 244,948. Divided and this application filed June 26, 1905. Serial No. 267,114.

*To all whom it may concern:*

Be it known that I, LOUIS MARIE GABRIEL DELAUNAY-BELLEVILLE, engineer, a citizen of the French Republic, residing at Neuilly-sur-Seine, Department of the Seine, France, have invented certain new and useful Improvements in Oil-Pumps, described in the application for United States Letters Patent, Serial No. 244,948, filed February 9, 1905, of which this application is a divisional application, of which the following is a specification.

This invention has for its object improvements in the oil-pump of the device for lubricating under pressure explosion-engines, and more especially explosion-engines for motor vehicles or boats and transmission mechanism of said vehicles or boats described in the application for United States Letters Patent, Serial No. 244,948, filed February 9, 1905.

This improvement is provided for increasing the angle of oscillation of the pump in motors the dimensions of which are such that the angle of oscillation of the pump is not sufficient for insuring a good distribution.

The accompanying Figures 1 and 2 are sectional side elevations through a pump provided with the improvements forming the object of this invention.

On the drawings, 1 is the motor-shaft; 2, an eccentric mounted on this shaft; 3, the eccentric-strap; 4, the piston of the oscillating pump; 5, the oscillating oil-pump; 6, the fixed part of the pump; 7 and 8, the suction and outlet apertures of the pump; 9, the casing of the motor; 10, a cup at the lowest part of the casing, in which the oil accumulates for being sucked by the pump.

According to the invention the eccentric-strap 3 is jointed at 11 to the piston 4 and at 12 to a link 13, the other end of which is jointed to the casing 9 at 14. The link 13 acts on the strap and insures a horizontal movement of the articulation 11 when the

eccentric moves vertically. The angle of oscillation of the piston is thus increased.

In Fig. 2 the strap 3<sup>a</sup> of the eccentric 2<sup>a</sup> is in one piece with the piston 4<sup>a</sup> of the oscillating pump 5<sup>a</sup>. It is obvious that in such construction the action of the piston 4<sup>a</sup> passes always through the center of the eccentric 2<sup>a</sup>, the angle of the oscillation of the pump 5<sup>a</sup> being limited by the extreme position of the center.

In Fig. 1 the piston 4 of the pump 5 is hinged to the strap 3. As this strap 3 is hinged, as at 12, at its upper end to one end of a link 13 and the other end of the link 13 hinged to the casing 9, the point 12 remains nearly motionless, going only over a little arc of a circle having the point 14 as the center. Consequently when the eccentric 3 rotates the oscillation of the point 11 is very great. The angle of oscillation of the axis of the piston 4 is greater than in the disposition shown in Fig. 2.

Having thus described and ascertained the nature of my invention and in what manner the same may be performed, I declare that what I claim is—

In a lubricating device, the combination with an oscillatory pump, of means for increasing the angle of oscillation of the said pump, said means consisting of an eccentric-strap mounted upon and driven by a shaft, means for connecting the strap to the piston of the pump, a pivoted link, and means for connecting the strap to said link at a point diametrically opposite the connection between the strap and the piston.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LOUIS MARIE GABRIEL

DELAUNAY-BELLEVILLE.

Witnesses:

EMILE KLOH,  
PIERRE LEISSE.