DUCHSCHER Pierre

(1842 - 1904)

Esch-sur-Sûre

Patents (details)

1 - Göpelwerk mit zweifacher Kettenübersetzung

DE patent	8678
Date of application	3 April 1879
Co-inventors	DUCHSCHER Pierre
	SPOO Mathias Caspar

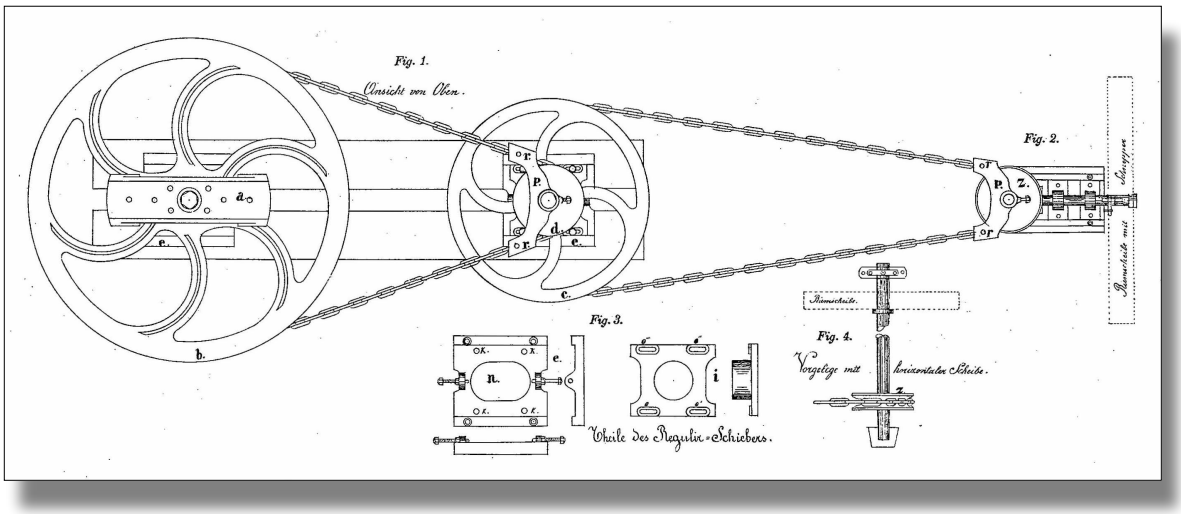
Das Kettengöpelwerk enthält zwei (Fig. 11) oder mehrere (Fig. 10) Wellen mit den zugehörigen Rädern.

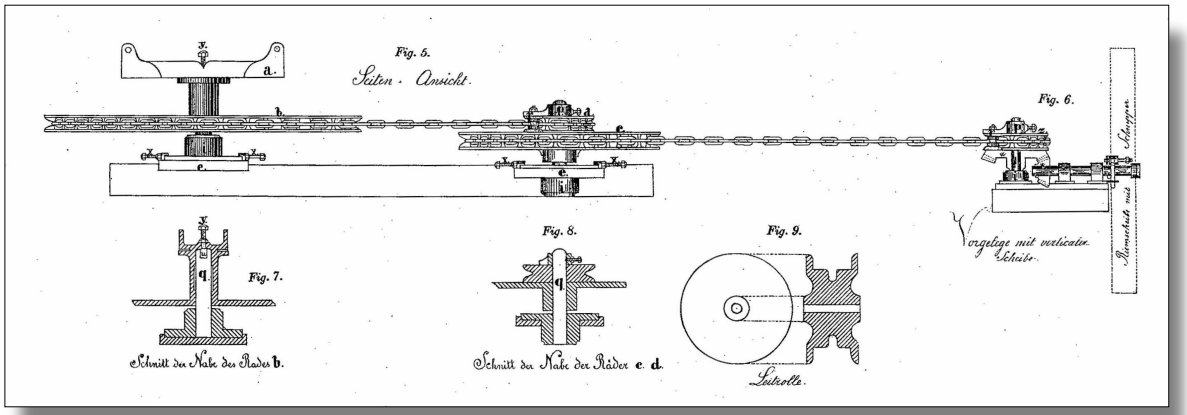
Der der Beschreibung zu Grunde liegende Kettengöpel hat drei Wellen, Fig. 1 und 5, und besteht aus dem grossen Kettenrade ***b****, an welchem der Deichselhut* ***a*** *angebracht ist, dem mittleren Kettenrade* ***c****, dem Kettentrieb* ***d****, dem Trieb* ***z*** *und den die drei Wellen miteinander verbindenden lose gespannten zwei Ketten. Die erste Kette geht von dem Hauptrade* ***b*** *auf den Trieb d des Doppelrades; letzteres ist auf die selbe Weise durch die zweite Kette mit dem Trieb* ***z*** *verbunden.*

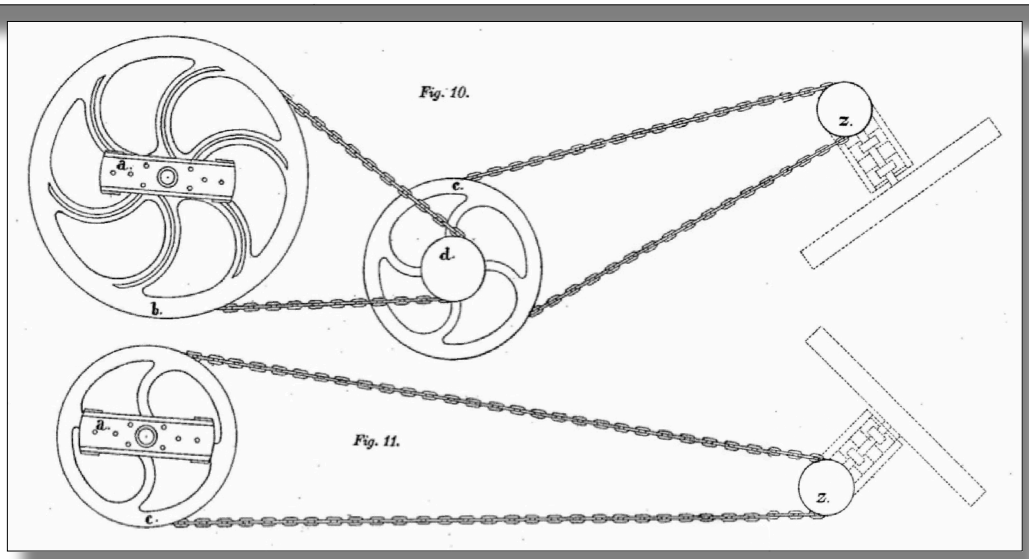
Sämtliche Räder sind aus Gusseisen, und die Profile der Radkränze, Fig. 5, entsprechen in jeder Hinsicht dem Kettenprofile, so dass die Kettenringformen genau in die Radkränze passen.

Das Hauptrad ***b*** *dreht sich um einen in dessen Nabe eingepassten schmiedeisernen Stift* ***q****, Fig. 7, der in einem gusseisernen Sockel* ***i****, Fig. 5, mit breiterer, vierkantiger Platte eingesetzt ist. Das Ganze ruht auf der starken gusseisernen Unterplatte* ***e****, Fig. 5. Die beiden Sockelplatten, unter sich zu einem Ganzen verbunden, bilden den Regulirschieber, Fig. 3.*

Das Gewicht des Hauptrades, des Deichselhutes und der hieran zu befestigenden Zugdeichsel, sowie jeder Druck, der beim praktischen Betriebe auf diese Theile etwa ausgeübt werden könnte, wird durch den gestählten und gehärteten Schraubenbolzen ***y****, Fig. 5 und 7, getragen, welcher seinerseits auf einem Bolzen* ***u****, Fig. 7, ausgehärtetem Stahl läuft, der in das obere Ende des Stiftes* ***q*** *eingesetzt ist.*







Corresponding patent

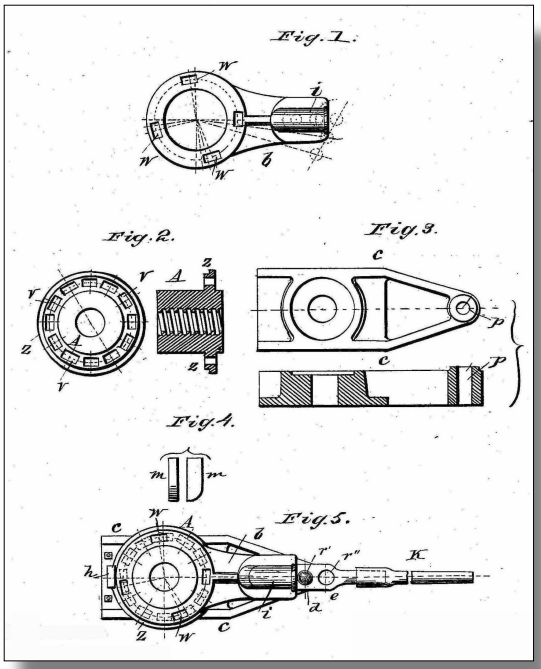
LUA233

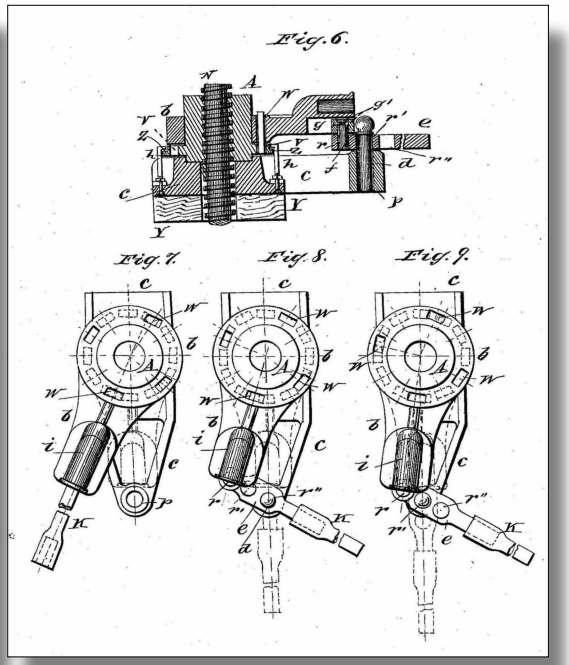
2 - Differential lever press

US patent	298188
Application date	1 April 1884
Co-inventors	DUCHSCHER André
	SPOO Caspar Mathias

This invention relates to differential levers, which are especially designed for presses of various kinds; and it consists in a lever-press power, which will be fully understood from the following description, when taken in connection with the annexed drawings.

***A** designates a nut, which is provided with an annular rim or flange, **Z**, having square openings **v**, arranged equidistant from each other and from the axis of the nut, and adapted to receive drop-pins **m**, which prevent the nut from turning when the differential lever **b** is operated. Around the nut **A**, and sustained on the flange **Z**, turns the differential lever **b**, which is provided with openings **w**, in which the drop-pins **m** move up or down. The differential lever is provided with four drop pins **m**. The openings in the nut and those in the differential lever are arranged in circles of the same diameter. The division of the openings v in the nut **A** is the same, that is to say, the distance of all of said openings from one another is equal. The division of the four drop-pin openings **w** in the differential lever is unequal, and is one-quarter of the twelve divisions of the openings in the flange of the nut, and is the sum total of the division differences of the distance of two opening's in the nut **A**, when measured from center to center, as shown in Figs. 1 and 2.*





Corresponding patents [1]

LU, DE, FR, BE, AT, ES (2)

[1] *cited in patent US298188*

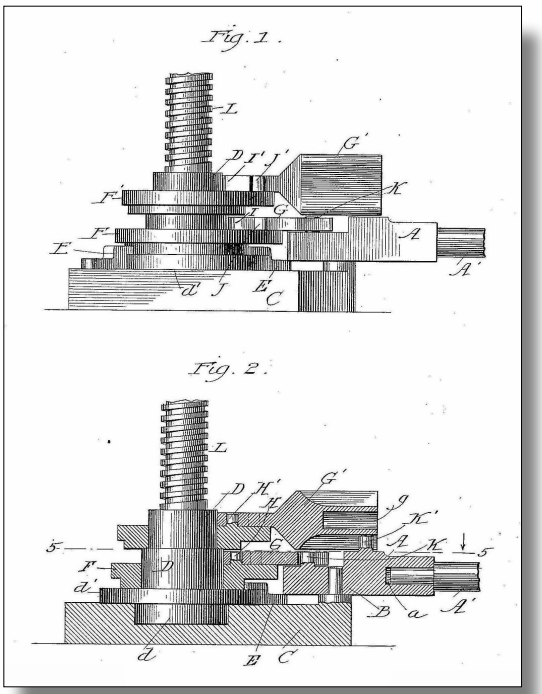
3 - Mechanical movement

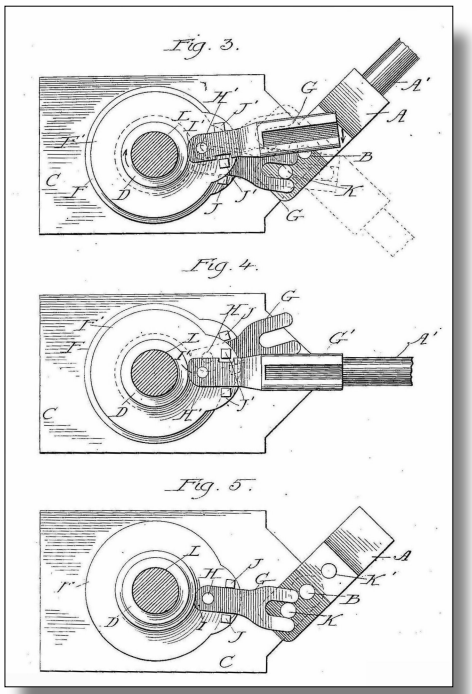
US patent 662061
Date of application 28 December 1899

The present invention relates to that class of organisms used in the transmission of power in which the force is multiplied in transmission; and the object of the invention is to provide an improved organism of this class, one especially adapted for the utilization of manual power in the production of heavy strains. The invention relates solely to the transmitting mechanism and has nothing whatever to do with the character of the machine in which the power is utilized further than that it contemplates the presence of such accessories as will make the improved mechanism available for the production of some useful result. I may mention, however, that the invention is especially adapted for use in presses of various kinds, lifting-jacks, windlasses, and many other machines intended for producing heavy strains.

The primary element of the improved organism or the element to which the power is applied primarily is a lever, and the ultimate element of said organism is a revolvable part, such as a wheel, a drum, a shaft, a disk, or the like. An incident of the operation of the device is that the oscillating or reciprocating motion of the lever is during its transmission converted into rotary motion; but if the final application of the power does not require rotary motion the motion may be again converted by any of the well-known appliances for this purpose.

I am aware that organisms for accomplishing all that I have thus far described are old, a good example of such an organism being shown in United States Letters Patent No. 298,188, granted to myself and others May 6, 1884, and I therefore desire to have it understood that my present invention consists in those features of novelty that are hereinafter fully described with reference to the accompanying drawings …





Corresponding patents

LU, CH, ES