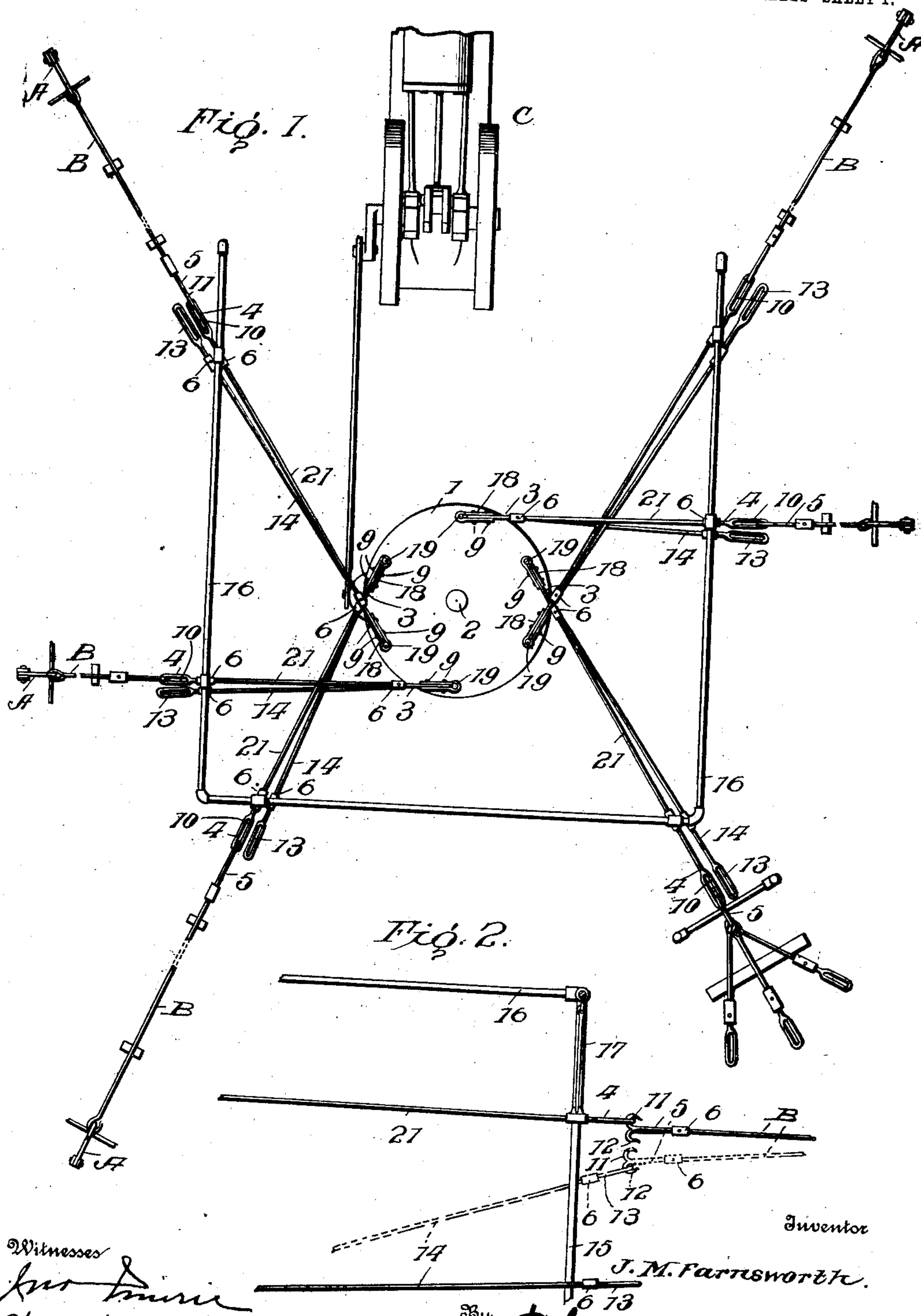


No. 826,775.

J. M. FARNSWORTH. PATENTED JULY 24, 1906.
LINK, HOOK, AND TONGUE FOR PULL RODS.
APPLICATION FILED DEC. 19, 1905.

2 SHEETS—SHEET 1.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN M. FARNSWORTH, OF CHERRYVALE, KANSAS.

LINK, HOOK, AND TONGUE FOR PULL-RODS.

No. 826,775.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed December 19, 1905. Serial No. 292,514.

To all whom it may concern:

Be it known that I, JOHN M. FARNSWORTH, a citizen of the United States, residing at Cherryvale, in the county of Montgomery and State of Kansas, have invented certain new and useful Improvements in Links, Hooks, and Tongues for Pull-Rods, of which the following is a specification.

In operating a system of oil-wells it is common to locate the engine or source of driving power at a point within easy reach of all the wells, stations, or points to which power is to be transmitted and to employ power-translating means for conveying motion from said engine or source of power to the wells or other parts to be operated.

This invention has for its object to devise novel means for connecting the pull-rods of oil-wells with the driver operated by the engine or source of power and to provide mountings for the power-translating means of peculiar structure, all as will appear more fully hereinafter.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which—

Figure 1 is a top plan view of a power-translating mechanism embodying the invention. Fig. 2 is a detail view of a portion of the framework surrounding the engine or power-houses, showing the manner of supporting the inner end of the pull-rods and the coupling connection. Fig. 3 is a detail view of the coupling connections on a larger scale. Fig. 4 is a detail view of the parts shown in Fig. 3, the coupling members being separated and disposed in the relation in which they will appear when coupled. Fig. 5 is a detail view showing one pull-rod anchored and another pull-rod coupled to the driver.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The reference-letter A indicates a series of oil wells, stations, or parts to which power is to be transmitted from a central station or other point common and convenient to each. The reference-letter B indicates pull-rods or like means for transmitting power from the engine or central station to each of the oil-wells or like parts. The engine C may be of any type best adapted to the location and for the special purpose and may be housed or protected in any manner. The driver 1 is preferably a disk, plate, crank-wheel, or like part and is mounted upon a shaft 2, which is connected in any manner with the engine or source of power C, so as to be driven thereby. The pull-rods B are connected to the driver 1 by connections which embody the invention. These connections consist of a tongue 3, link 4, and hook 5, which are coupled by means of clamps 6. One end of each coupling device is provided with a head 7 and the part adjacent to said head is made rounding to admit of the connecting of the coupling by a swivel-joint. Each clamp 6 consists of two plates which are adapted to be fastened and which are provided in their meeting faces with matching depressions to receive the heads 7 and a portion of the coupling adjacent to said head, the parts being of such relative proportions as to admit of a limited play, whereby the coupling elements may turn freely and adapt themselves to the line of strain without binding.

An end portion of the tongue 3 is flattened and provided with a series of openings 8, any one of which is adapted to receive pins 9, by means of which it has adjustable connection with a strap 18, the latter fitting over a wrist-pin 19, projected from the driver 1. The link 4 is provided with a slot 10 at one end to receive a hook 11 of the coupling member 5, the latter being connected to the inner end of the pull-rod B by means of a clamp 6. The hook member 5 is provided at one end with oppositely-extended hooks 11 and 12, the former adapted to pass through the slot or opening 10 of the link 4, and the latter adapted to receive the link or eye 13 at the outer end of an anchor-rod 14 which is made fast at its inner end in any manner and which is adapted to hold the pull-rod of the well or like part when disconnected from the driver.

From the foregoing it will be observed that

the hook member 5 is connected directly to the inner end of the pull-rod and the link member 4 is connected with the driver 1 by means of a rod 21, tongue 3, and strap 18, and as a result of this arrangement the members 4 and 5 may be readily uncoupled or coupled, as may be required. The provision of the two hooks 11 and 12 enables the latter to be coupled to the link 13 of the anchor-rod when it is required to throw a well out of action and also admits of readily coupling the hook 11 to the link 4 when it is required to disconnect the pull-rod from the anchor-rod and throw the well into action. It is further noted that the pull-rods and coupling means are mounted in a manner to admit of their free movements, thereby obviating loss of power and dispensing with friction devices which produce wear and materially detract from the efficiency of the system.

A framework surrounds the power-house, engine, or source of power, and this framework is preferably constructed of tubing and comprises uprights 15 and a rail 16, the latter being elevated the desired distance from the ground and supported by means of the uprights 15 or in any substantial way, so as to provide a rigid structure. Hangers 17 are mounted upon the rail 16 and are free to swing at their lower ends and support the link members 4 to admit of their free movement, so as to adapt themselves to the line

of strain and obviate any material detracting of the driving power.

Having thus described the invention, what is claimed as new is—

1. In power-translating means for a system substantially as set forth, the combination of a driver, a pull-rod for transmitting power, a tongue and link connected by a swivel-joint and having adjustable connection with the driver, a hook member connected to the pull-rod by means of a swivel-joint and provided with companion hooks, one of which is adapted to engage with the said link member, and an anchor-rod to make connection with the other hook.

2. In power-translating means for a system substantially as specified, the combination of a driver provided with a wrist-pin, a pull-rod, coupling means between said driver and pull-rod embodying a series of links, one of said links having a flattened portion provided with a series of openings, and a strap fitted to said wrist-pin and adapted to be connected with selected openings of the link having the apertured flattened portion.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. FARNSWORTH. [L. s.]

Witnesses:

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