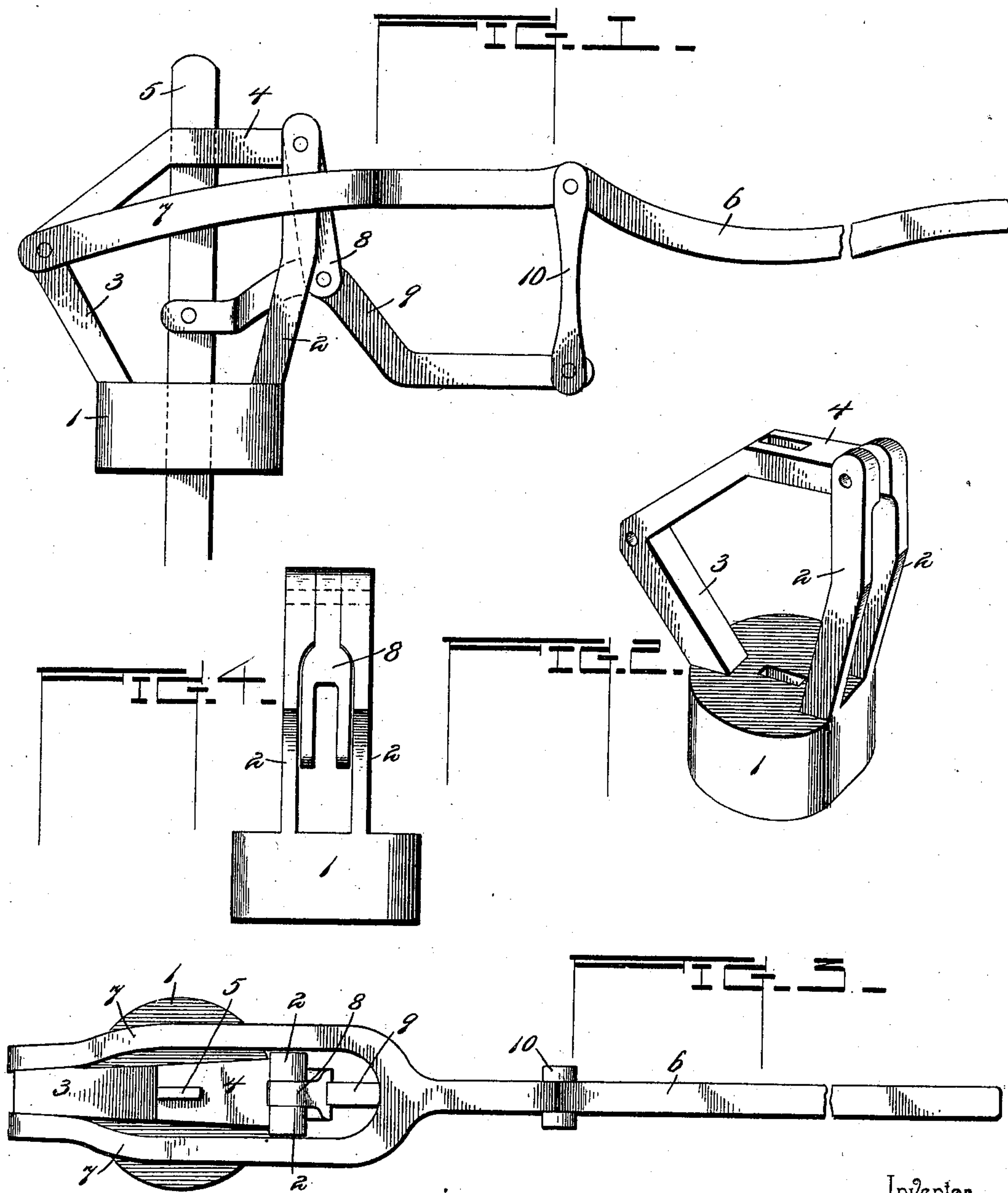


(No Model.)

T. BURKE.
PUMP HEAD.

No. 599,073.

Patented Feb. 15, 1898.



Inventor

Witnesses

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By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

THOMAS BURKE, OF BASSWOOD, WISCONSIN.

PUMP-HEAD.

SPECIFICATION forming part of Letters Patent No. 599,073, dated February 15, 1898.

Application filed April 28, 1897. Serial No. 634,221. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BURKE, a citizen of the United States, residing at Basswood, in the county of Richland and State of Wisconsin, have invented a new and useful Pump-Head, of which the following is a specification.

This invention relates to pumping machinery, and more particularly to that class of deep-well pumps designed to be operated by hand, the purpose being to secure an increased leverage and the consequent greater ease of operation.

The improvement consists of the novel formation of the head and the combination therewith of the pump-operating devices, which hereinafter will be referred to at length and finally claimed.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a pump-head embodying the vital features of this invention. Fig. 2 is a perspective view of the head, the pump-rod and actuating devices being omitted. Fig. 3 is a top plan view of the head having the operating mechanism in position. Fig. 4 is a rear view of the head, showing the link supporting the auxiliary lever in position.

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

The head 1 will be of suitable construction to conform and fit the required make or style of pump to which the invention is to be applied, and is provided at one side with companion uprights 2 and at its opposite side with a crooked or elbow support 3, terminating in an overhanging arm 4, connecting with the upper extremities of the uprights 2. The pump-rod 5 is directed in its vertical movements by operating through openings in the head 1 and arm 4, said openings being of a

size to prevent lateral play of the pump-rod without interfering with its free vertical movement.

The lever or handle 6, provided for operating the pump, is cleft at its inner end, and the cleft portions 7 embrace the sides of the uprights 2 and crooked support 3 and have pivotal connection with the latter at the elbow or point of flexion. A link 8 is located between the uprights 2 and has pivotal connection therewith and is notched at its lower end to receive a lever 9, which is fulcrumed thereto at a suitable point between its ends. The inner end of the lever 9 has pivotal connection with the pump-rod 5 and its outer end is connected with the handle or lever 6 by means of a link 10, which is notched at its ends to embrace the sides of the parts pivoted thereto.

It will be observed that the lever or handle 6 extends entirely across the head 1 and is pivotally supported to one side thereof by means of the crooked support or standard 3. Hence a long leverage is secured. The auxiliary or supplemental lever 9 has a floating or movable fulcrum by reason of its pivotal connection with the swinging link 8, and the manner resorted to of connecting it with the pump-rod and the handle 6 results in an increased effective leverage and greater ease in the operation of the pump.

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

1. In combination, a pump-head having uprights at one side, a standard at the opposite side, and a connecting-arm, a pump-rod located between the upright and standard and directed in its movements by guide-openings in the arm and head, a horizontal lever or handle extending across the pump-head and having pivotal connection with the standard, a link pivoted at its upper end to the arm and standard at about their juncture, a short supplemental lever placed below the main lever and extending about parallel therewith and having pivotal connection intermediate of its ends with the lower end of the pendent pivoted link, and having its inner end pivoted directly to the pump-rod, and a link connecting the outer end of the supplemental lever with the main lever or handle, substantially as set forth.

2. In combination, a pump-head having

formed therewith, or rigidly attached thereto parallel uprights at one side, and a crooked standard at the opposite side terminating in an overhanging arm joined to the upper ends
5 of the uprights, a pump-rod working through openings in the head and overhanging arm, a pendent link operating in the space formed between the uprights and pivoted to the upper ends thereof, a supplemental lever about
10 parallel with the main lever and placed between it and the head and fulcrumed between its ends to the pivoted pendent link and having direct pivotal connection at its inner end with the pump-rod, a main horizontally-dis-
15 posed lever or handle cleft at its inner end

and having the cleft portions embracing the sides of the uprights and crooked standard and pivoted to the latter at the elbow or point of flexion, and a link connecting the outer end of the supplemental lever with the main lever, 20 substantially as set forth for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS BURKE.

Witnesses:

K. W. EASTLAND,
A. W. PIER.