

(No Model.)

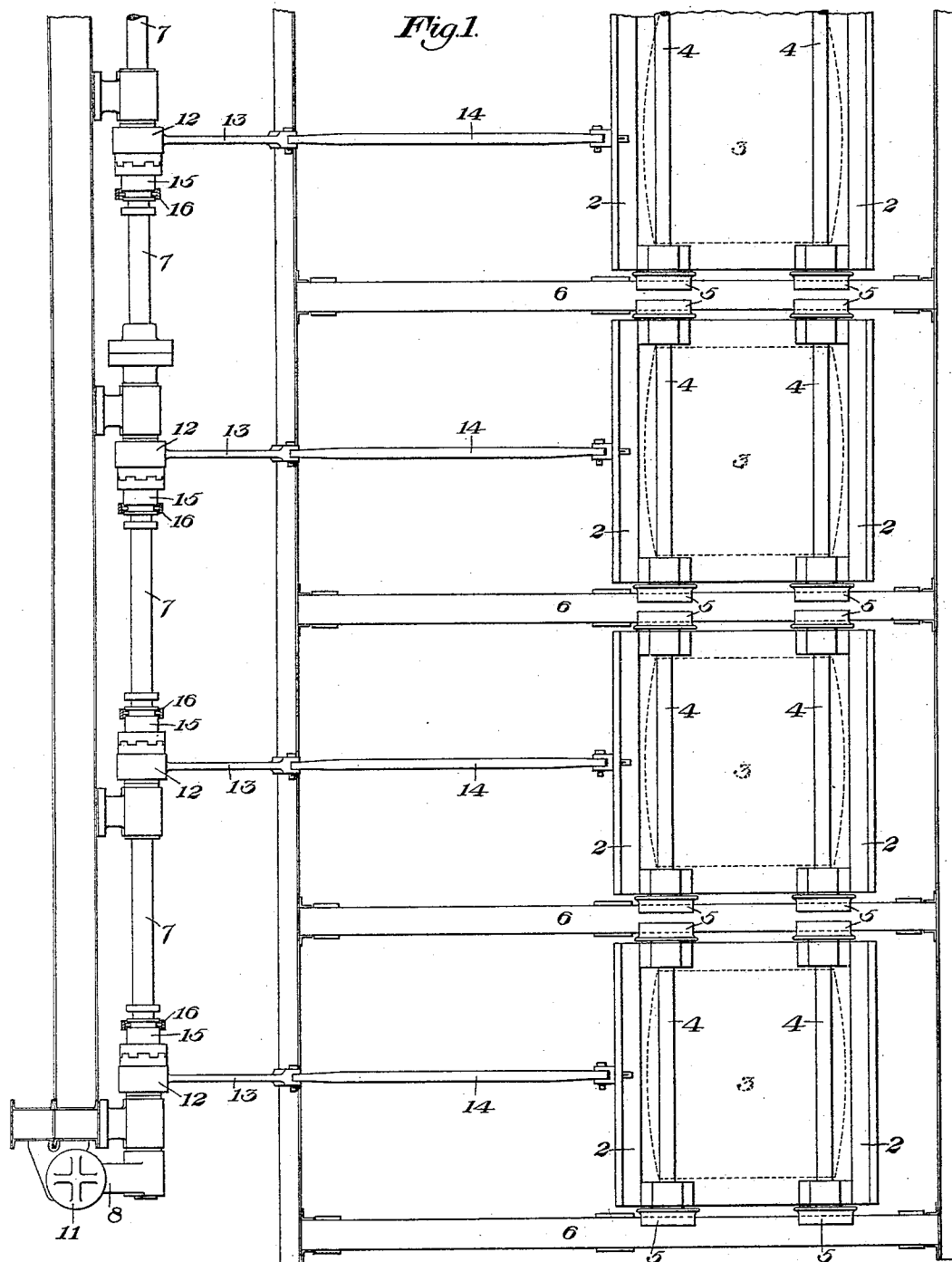
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APPARATUS FOR OPERATING SOAKING PITS.

No. 569,485.

Patented Oct. 13, 1896.



WITNESSES

Warren W. Swartz
C. E. MacKinnon

INVENTOR

Per Jonsten Berg
by B. B. B. B. B.
his attys

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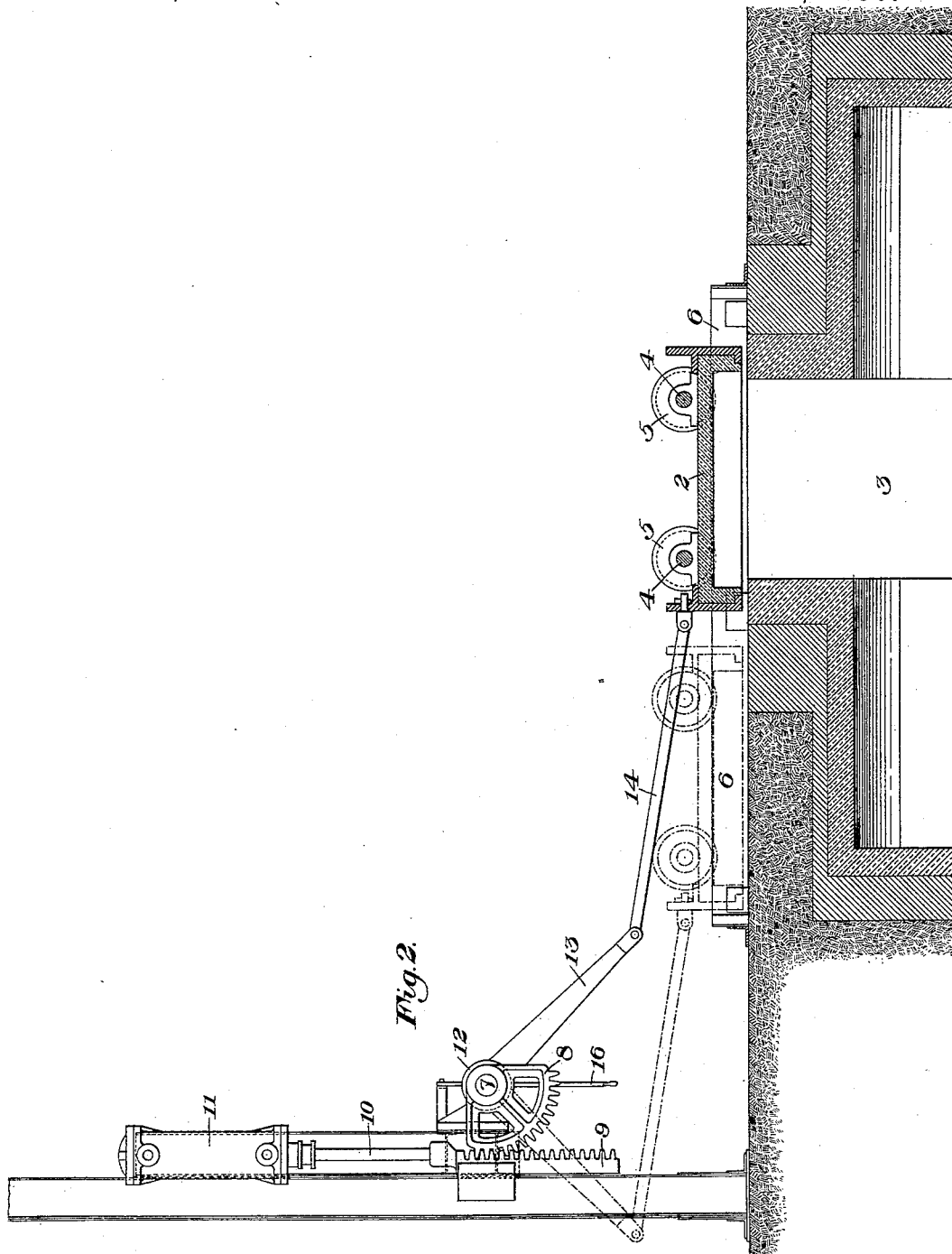
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UNITED STATES PATENT OFFICE.

PER T. BERG, OF MUNHALL, PENNSYLVANIA.

APPARATUS FOR OPERATING SOAKING-PITS.

SPECIFICATION forming part of Letters Patent No. 569,485, dated October 13, 1896.

Application filed January 7, 1896. Serial No. 574,606. (No model.)

To all whom it may concern:

Be it known that I, PER TORSTEN BERG, of Munhall, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Operating Soaking-Pits, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a top plan view of a series of soaking-pits provided with my improved cover-operating apparatus, and Fig. 2 is a vertical cross-section of the same.

My invention relates to the operating of the horizontally-moving covers of soaking-pits, and is designed to afford a cheap and efficient device of this character which shall obstruct the floor-space as little as possible and allow a single operator to move any one of a series of these covers by a single cylinder and valve. Heretofore these sliding doors have been directly connected to the piston-rod of the hydraulic cylinder in line therewith, and in case of any canting or sinking of the masonry the piston-rod would become bound or bent and prevent the cylinder from acting properly. Moreover, each cover must be operated in such case by its own hydraulic cylinder and valve. My invention overcomes these difficulties and enables a single hydraulic cylinder to operate any one of a series of covers, while at the same time any sinking or canting of the masonry has no effect upon the device, there being a flexible connection between the covers and the cylinder.

In the drawings, 2 represents the covers of a series of soaking-pits 3, arranged in line with each other, these covers being hung from transverse shafts 4, having wheels 5, which move on tracks 6. At one side of the line of pits I secure, preferably to the side columns of the building, a horizontally-extending shaft 7, one end of which is provided with a segmental pinion 8, which intermeshes with a vertically-extending rack 9, carried at the end of the piston-rod 10 of a hydraulic cylinder 11, secured to one of the columns. Loosely surrounding the shaft are a series of

collars 12, having downwardly-extending levers 13, which are connected by pivoted links 14 to the ends of the covers. Each collar 12 forms a portion of the crab-clutch, the other portion 15 of which slides upon the shaft and is actuated by a hand-lever 16.

The operation of the device is apparent; the operator, throwing into gear any one of the clutches, then, by means of the hydraulic cylinder, moving the corresponding cover as desired.

The advantages of my invention result from the fact that as the hydraulic cylinder has flexible connection with the covers any sagging or displacing of the covers in no wise affects their easy operation, while a single cylinder takes the place of a series of cylinders and the operator is able to move any one of the series of covers therefrom.

Many changes may be made in the form and arrangement of the parts without departing from my invention, since

I claim—

1. The combination with a series of soaking-pits and their covers, of a shaft extending past the series and having a series of clutches thereon, each clutch being connected to one of the soaking-pit covers; substantially as described.

2. The combination with a series of soaking-pits, and their covers of a shaft having a series of clutches, each clutch having a flexible connection with a soaking-pit cover, and a hydraulic cylinder arranged to oscillate said shaft, substantially as described.

3. The combination with a series of soaking-pits, and their covers of a shaft extending longitudinally at one side of the same and connected with the covers, and a hydraulic cylinder having a rack-and-pinion connection with said shaft, substantially as described.

In testimony whereof I have hereunto set my hand.

P. T. BERG.

Witnesses:

C. BYRNES,

H. M. CORWIN.