

J. CARLÉSIMO.

DREDGE.

APPLICATION FILED NOV. 8, 1907.

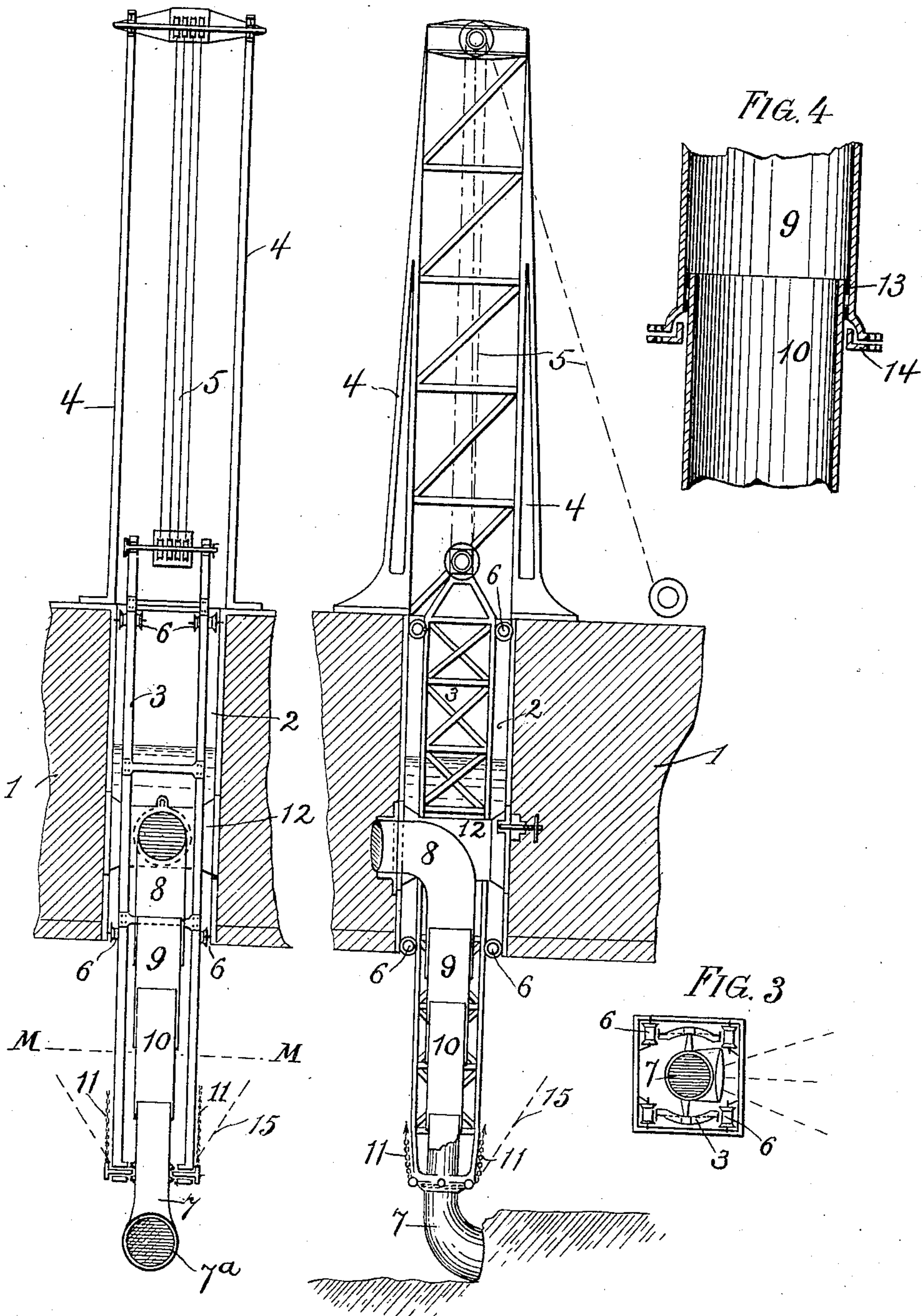
925,079.

Patented June 15, 1909.

FIG. 1.

FIG. 2.

FIG. 4.



Witnesses
Jesse N. Lutton.
M. Kommer.

Inventor
By his Attorney Julio Carlésimo
Henry O. J.

UNITED STATES PATENT OFFICE.

JULIO CARLÉSIMO, OF BUENOS AYRES, ARGENTINA.

DREDGE.

No. 925,079.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed November 8, 1907. Serial No. 401,314.

To all whom it may concern:

Be it known that I, JULIO CARLÉSIMO, a subject of the King of Italy, residing at Buenos Ayres, Argentina, have invented certain new and useful Improvements in Dredges, of which the following is a specification.

My invention relates to improvements in dredges in which the material to be dredged is collected during the travel of the vessel by pushing the dredging head into the material so that the latter forms an embolus at the mouth of the head and prevents the simultaneous entrance of water into the suction conduit, the continued traveling of the barge to which the head is held in fixed relation and the continually forming embolus causes or assists in elevating the material in the conduit.

The objects of my improvements are to reduce to a minimum the length of the conduit, to maintain the cutting edge of the dredging mouth with relation to the bottom to be dredged without the use of hinges or other means, and to provide a rigid support for the dredging head adapted to be readily adjusted and capable of overcoming the resistance offered by the material during the travel of the head through the material.

In the accompanying drawings:—Figure 1 is a front elevation of the suction conduit and supporting frame. Fig. 2 a side elevation of the same. Fig. 3 is a horizontal section on the line M—M of Fig. 1 and Fig. 4 an enlarged detail vertical section of the conduit.

In said drawings 1 designates so much of a barge or vessel sufficient to illustrate the invention, said barge being provided with an open well 2. Mounted within said well is a rigid trussed frame 3 suspended from a derrick 4 by suitable blocks and tackle such as 5 by means of which the frame is raised and lowered. Anti-friction bearing rollers 6 are journaled in the well to engage the longitudinal members of the frame to prevent lateral play and insure an easy adjustment of the frame in the well.

The conveyer-conduit comprises a dredging head 7 and a discharge head or section 8,

connected together by two or more telescoping sections as 9 and 10 by means of which the length of the conduit may be automatically changed.

One end of the dredging head 7 is preferably formed with an enlarged cutting mouth 7^a lying in a vertical plane and said head is mounted in the lower end of the frame 3 in such manner that it may be rotated in relation to the longitudinal axis of the conduit by means of controlling chains 11, which are connected with said head and adapted to be manipulated by any suitable means.

The discharge end section 8 is carried by a support 12 mounted in the well 2 and is provided with a horizontal portion which projects into the barge and with a vertical portion for the reception of one of the connecting telescoping sections.

To make the conduit air and water tight the several sections are provided with suitable packing rings as 13 and stuffing-boxes as 14 as shown in Fig. 4.

While the frame 3 is made sufficiently strong and rigid to overcome all resistance and to insure the penetration of the dredging head into the material, additional strengthening means may be provided such as brace chains 15 adapted to extend from the lower end of the frame 3 and be connected to the forward part of the barge.

I claim:

1. The combination with a vessel, of a dredging head having its mouth opening in the direction of travel of the vessel, a frame rigidly connected with the vessel carrying the head and adapted to cause the latter to penetrate the material during the travel of the vessel, and an automatically adjustable conduit connected to the head.

2. The combination with a vessel having a vertical well therein, of a rigid frame adjustably mounted in the well, a dredging head mounted in said frame having its mouth opening in the direction of travel of the vessel, a fixed discharge head, and a plurality of telescoping sections connecting the dredging and discharge heads.

3. The combination with a vessel having a

well therein, of a rigid frame movable vertically in said well, anti-friction bearings journaled in the well forming lateral supports for the frame, a dredging head mounted in
5 the lower end of said frame having its mouth lying in a vertical plane, a fixed discharge head communicating with the vessel and a plurality of telescoping sections within the

frame connecting the dredging and discharge heads.

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

JULIO CARLÉSIMO.

Witnesses:

ANT^D L. BELLO,

JULIO DEL ROMERIE.