(No Model.)

A. PICKARD.

CONSTRUCTION OF CANALS.

No. 448,072. Patented Mar. 10, 1891.

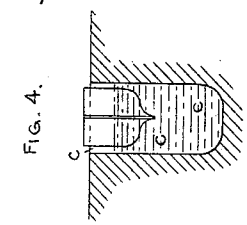

FIG. 4.

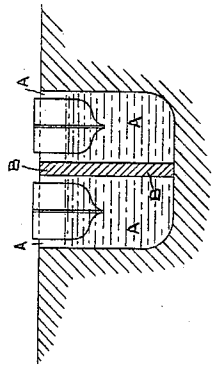

FIG. 3.

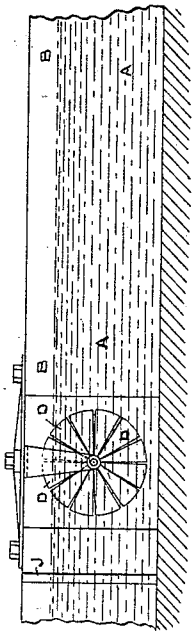

FIG. 2.

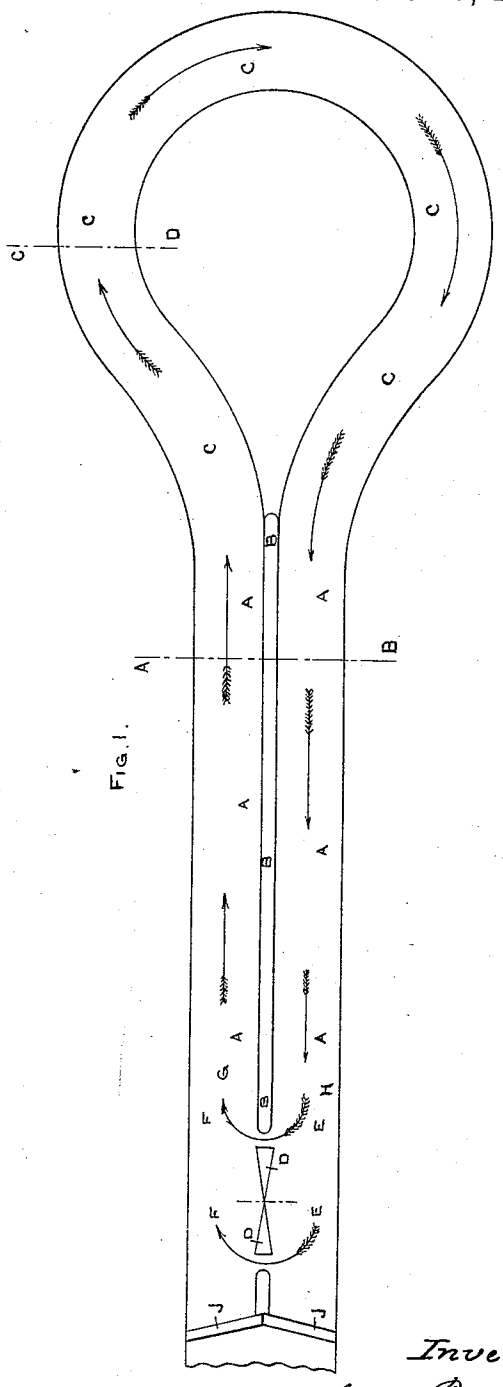

FIG. 1.

Witnesses:
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UNITED STATES PATENT OFFICE.

ARTHUR PICKARD, OF LEEDS, ENGLAND.

CONSTRUCTION OF CANALS.

SPECIFICATION forming part of Letters Patent No. 448,072, dated March 10, 1891.

Application filed June 4, 1889. Renewed February 11, 1891. Serial No. 381,028. (No model.) Patented in England July 20, 1888, No. 10,519.

To all whom it may concern:

Be it known that I, ARTHUR PICKARD, a subject of the Queen of Great Britain and Ireland, residing at Leeds, in the county of York, England, have invented new and useful Improvements in the Construction of Canals, (for which a patent has been granted me in Great Britain, dated July 20, 1888, No. 10,519,) of which the following is a full, clear, and exact description.

The object of my invention is to construct canals or water courses of a direct or circuitous description, and to provide means for imparting a current to the water for moving boats or other vehicles.

In the accompanying drawings, Figure 1 shows a plan looking at the top of canal; Fig. 2, a longitudinal section of the same; Fig. 3, a transverse section through A B, Fig. 1; and Fig. 4, a transverse section through C D, Fig. 1.

In the drawings I have shown a canal or water-course, which is either straight, as shown at A, divided longitudinally by a wall partition or mid-feather B, or continued, as shown at *c*, to any required distance in a circuitous or ornamental meandering form. In order to create a current in either direction or throughout the length of such canal or water-course, I employ a propeller D, paddle-wheel, pump, or other mechanical means, whereby the water is drawn from one side E to the other side F and passed round in a current throughout the whole length of the canal, as shown by arrows, the same water being passed round or made to travel in a current as often as required. The movement of the current may be reversed at pleasure by reversing the motion of the propeller D or other motor. The boat or other vehicle is placed in the water, say at G. The current then being produced, it floats along with the stream until it arrives at H. It is then conducted through lock J, and round again to the starting-point G. Other means may, when preferred, be employed for transferring the boats or other vehicles from one side H to the other side G.

The rotary movement is imparted to the propeller D or other motor from any convenient source.

I claim as my invention—

1. In a canal, a water-propelling wheel mounted in the canal and adapted to produce a current for the propulsion of boats, substantially as set forth.

2. In a canal having two legs or branches, a water-propelling wheel situated in the canal at the side of the channel and between said branches, substantially as set forth.

3. A continuous canal or water-course divided longitudinally by a wall partition or mid-feather and provided with a propeller-wheel for forcing the water from one side of said canal into the other side, whereby a continuous current is established, substantially as set forth.

4. A continuous canal or water-course divided longitudinally by a wall partition or mid-feather and provided with a propeller-wheel for forcing the water from one side of said canal into the other side, whereby a continuous current is established, and lock J for transferring boats from one side of the canal to the other, as set forth.

ARTHUR PICKARD.

Witnesses:
I. TOWNSEND THOMPSON,
F. CLIFTON MORGAN.