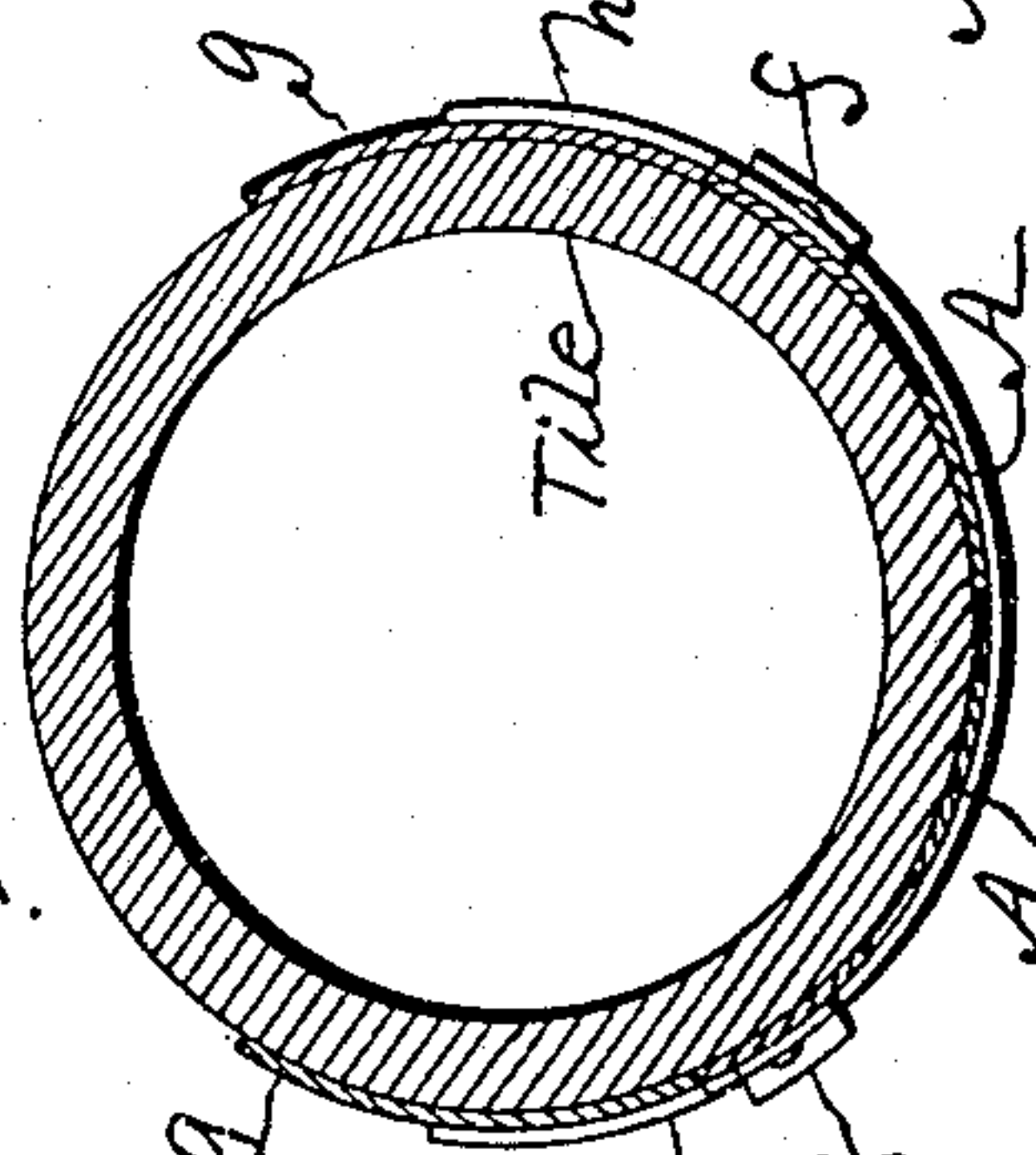
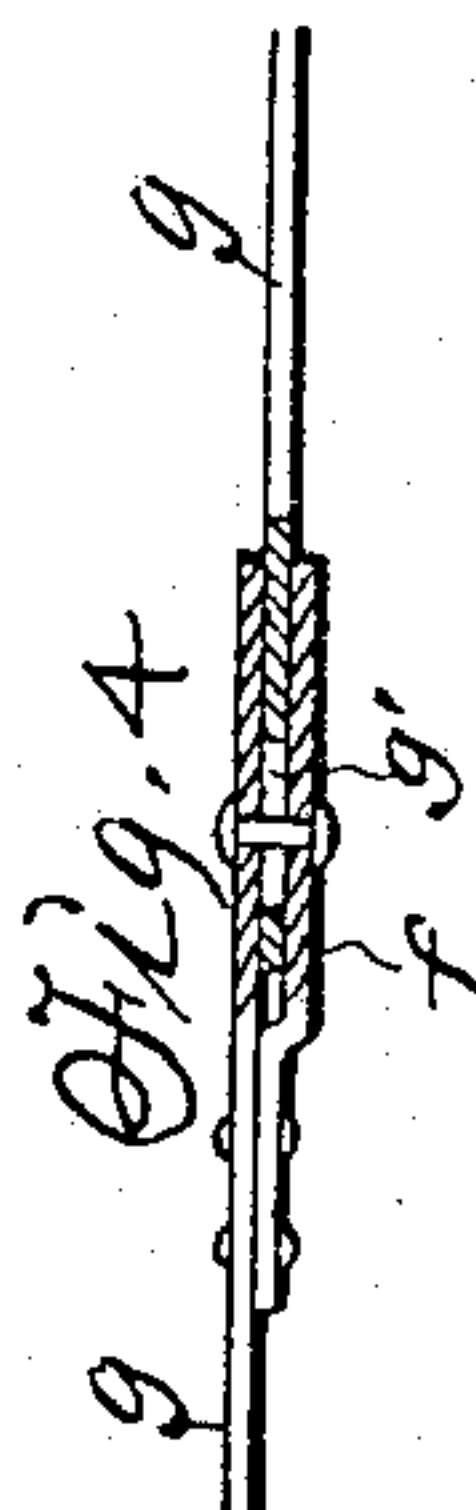
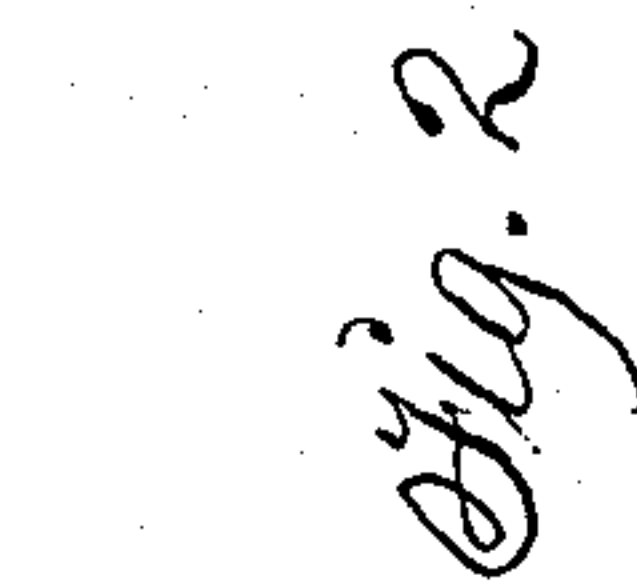
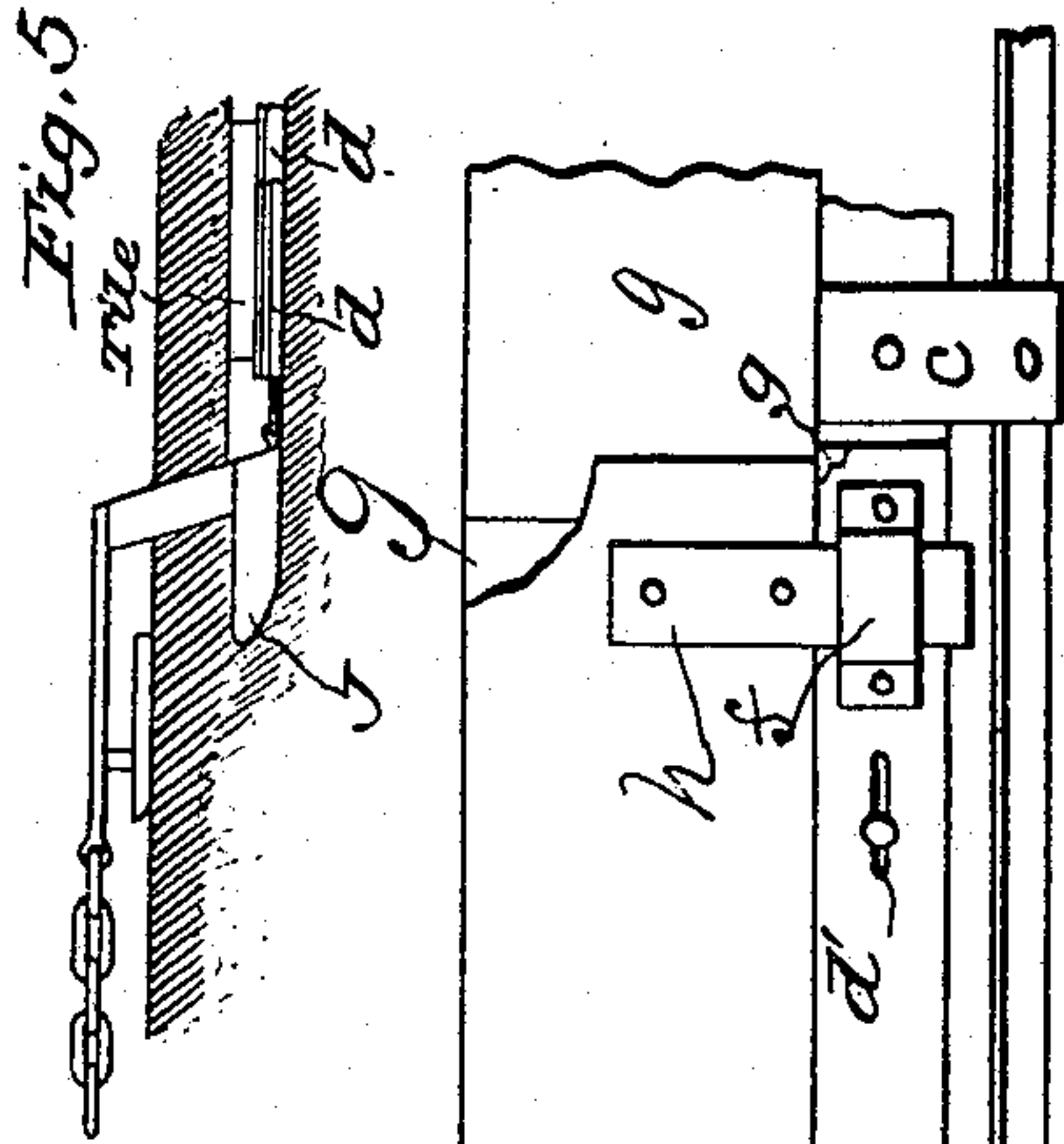
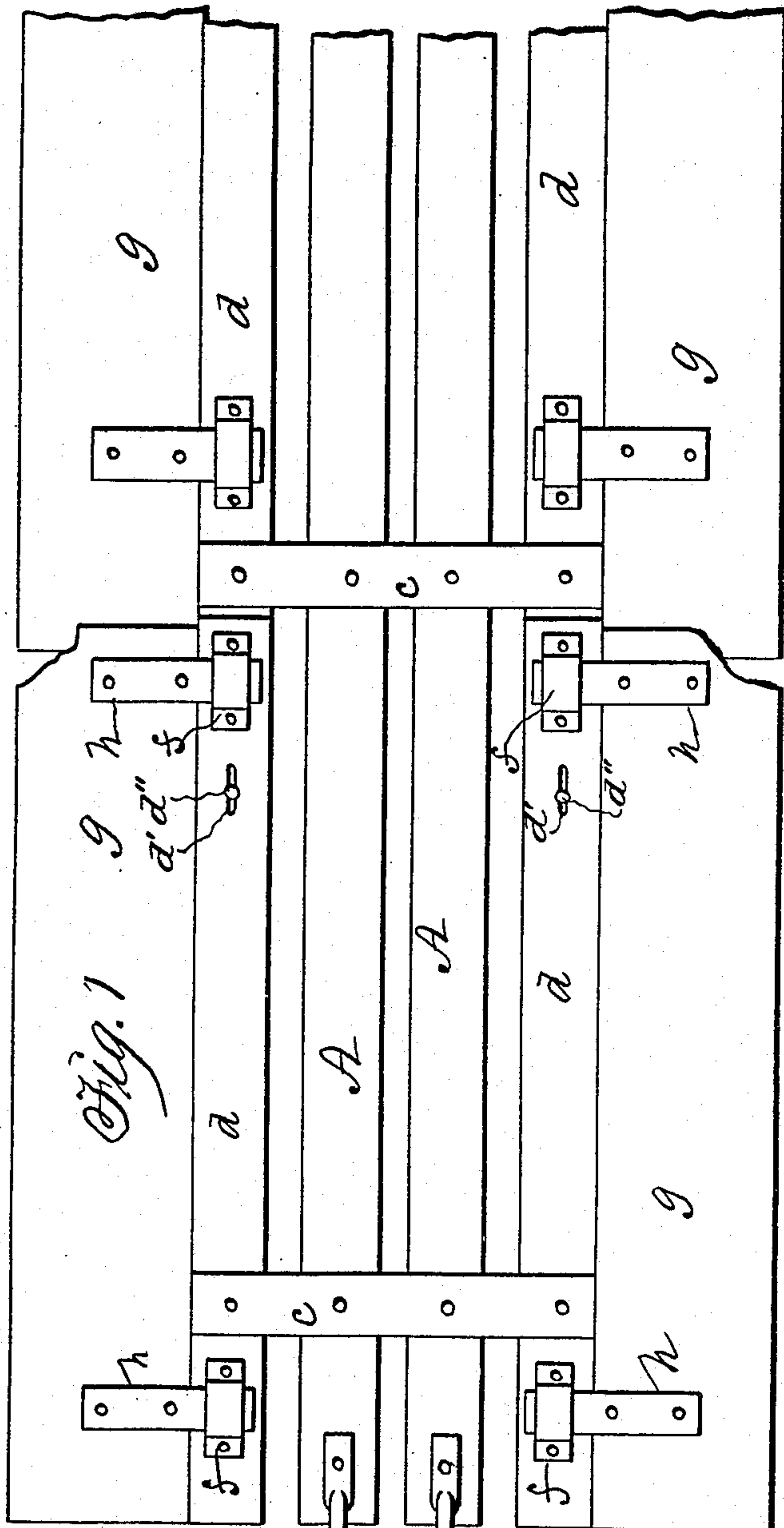


No. 827,301.

PATENTED JULY 31, 1906.

H. M. FISK.
TILE LAYING CARRIER.
APPLICATION FILED MAR. 2, 1906.



Witnesses:
R. E. Orwig.
A. H. Orwig.

Inventor: Henry M. Fisk,
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UNITED STATES PATENT OFFICE.

HENRY M. FISK, OF PELLA, IOWA.

TILE-LAYING CARRIER.

No. 827,301.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed March 2, 1906. Serial No. 304,427.

To all whom it may concern:

Be it known that I, HENRY M. FISK, a citizen of the United States, residing at Pella, in the county of Marion and State of Iowa, have
5 invented a new and useful Improved Tile-Laying Carrier, of which the following is a specification.

My invention relates to the flexible carrier for tile-laying machines for which United
10 States Letters Patent No. 421,488 were granted to me February 18, 1890; and it consists in detachably connecting auxiliary sides with the outside metal straps of the carrier in such a manner that they will be self-
15 adjusting whenever the carrier is deflected to the right or left in a ditch that has curves and will at all times project upward over the parallel sides of the tile laid in the carrier as required to prevent the ends of the tile from
20 contacting with side walls of the ditch and meeting resistance and in some instances being pushed back on the carrier, so that contiguous ends of tile laid as the carrier is advanced will not be as closely together as
25 they should be.

Figure 1 of the accompanying drawings shows the front end of my improved tile-carrier laid flat. Fig. 2 is a side view when the sides are turned up as required in practical
30 use, and Fig. 3 is a transverse sectional view of the carrier and a tile upon it as required to be pivoted and carried and placed in a ditch by the advance of the carrier in the ditch so the tile will slip off the rear end of the carrier.
35 Fig. 4 shows a lap-joint of metal straps flexibly connected. Fig. 5 shows a mole-plow under ground and a section of my carrier connected therewith as required for practical use.

40 A A are continuous flat flexible metal straps about one and one-half inch wide. They may vary in length, as desired.

B is an eye fixed to their front ends to be engaged by a hook connected with a mole-
45 plow.

c c are short flat flexible metal straps rigidly fixed across the under sides of the straps A at regular intervals.

d represents flat flexible metal straps, about
50 twenty inches long, pivotally connected with

the ends of the short straps c by means of rivets and with each other by means of flexible lap-joints that will allow longitudinal contraction and expansion. The ends of each of the straps d have elongated perforations d' 55 and the overlying sides have fixed pivots d'', that enter and traverse the perforations d'.

All the straps d are thus connected to produce flexible joints in which the front end of the straps d are covered by the rear ends of 60 the overlapping ones as required to produce a complete carrier that will readily bend laterally to facilitate laying tile in a curved line whenever desired.

Loops f are fixed to the straps d, and the 65 auxiliary sides g are provided with fixed straps h, adapted to enter the loops f, as required, for detachably connecting the sides with the carrier, so they can be taken off for laying small tile. The sides g are also con- 70 nected by lap-joints, in which there is shown a slot g' in the end of the side g and a rivet g'', fixed in the overlying parts g and f.

J is a mole-plow detachably connected with the eye B of the carrier, as shown in 75 Fig. 5.

Having thus set forth the purpose of my invention and the manner of its application and use, the practical operation and utility thereof will be readily understood by persons 80 familiar with the art to which it pertains.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a carrier for laying tile in a ditch, a carrier consisting of a plurality of flat metal 85 straps connected in parallel position with each other and auxiliary flat metal straps detachably connected with the outside straps of the carrier.

2. A flexible carrier for laying tile in a 90 ditch, comprising a plurality of flat metal straps in parallel position connected by flat flexible cross-slats, auxiliary flat metal straps and means for detachably connecting them with the outside straps of the flexible carrier, 95 to operate as set forth.

HENRY M. FISK.

Witnesses:

L. VAN REES,
E. S. COOK.