J. N. King.

Draw Bridge.

No. 12,952. Patented May 29, 1855.

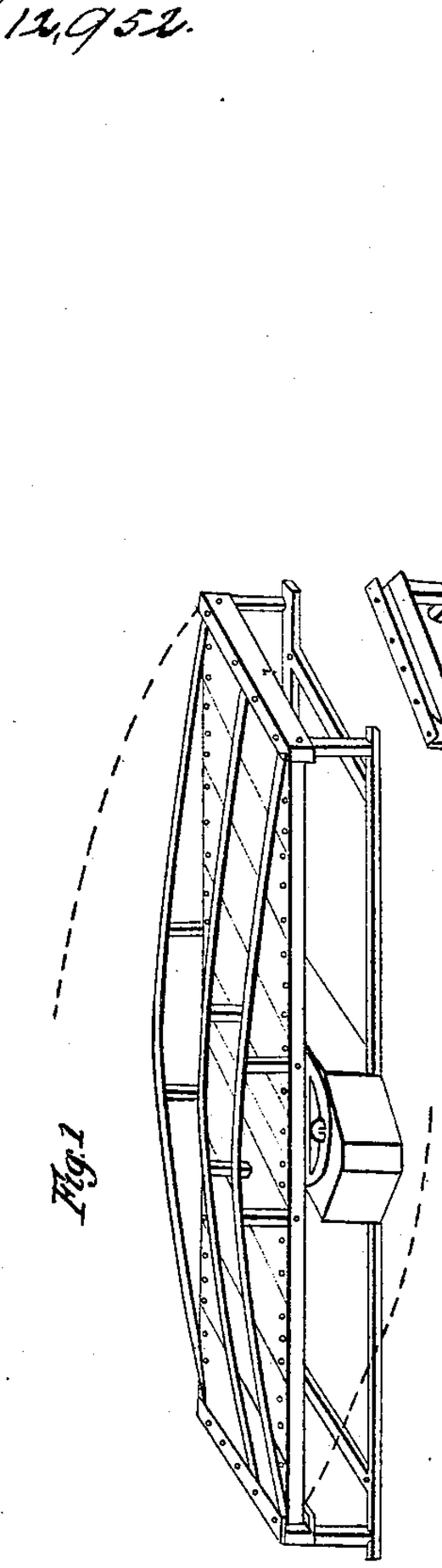

Fig. 1

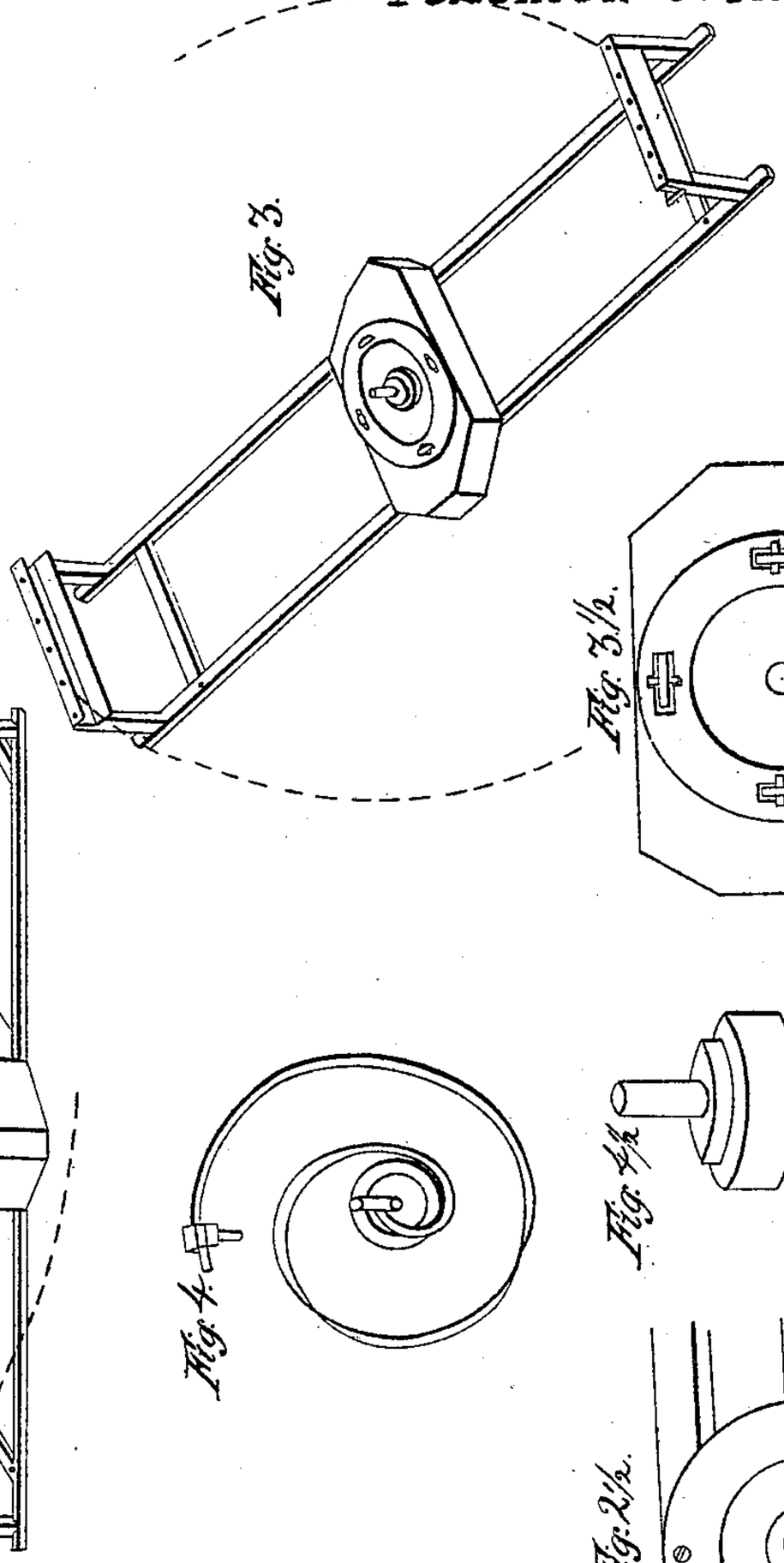

Fig. 3.

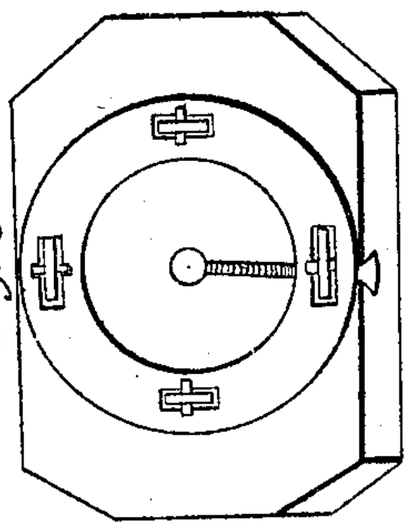

Fig. 3½.

Fig. 4.

Fig. 4½

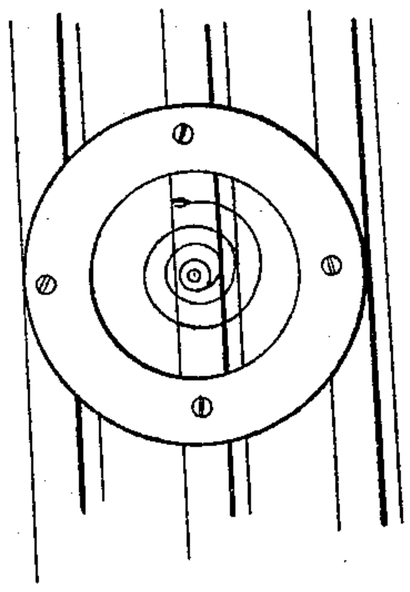

Fig. 2½.

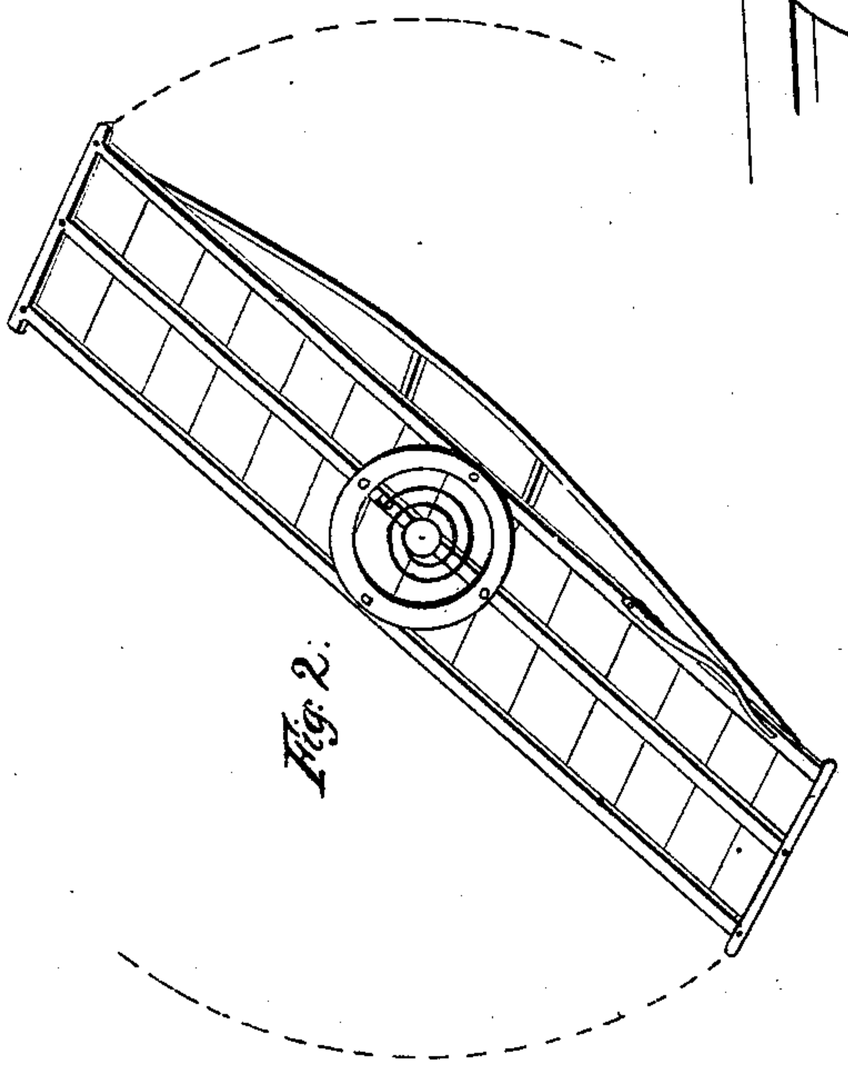

Fig. 2.

Witnesses.
John King
Ebnathon Wilcox

Inventor.
John N. King

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN N. KING, OF HULBURTON, NEW YORK.

SWING-BRIDGE.

Specification of Letters Patent No. 12,952, dated May 29, 1855.

To all whom it may concern:

Be it known that I, JOHN N. KING, of the town of Hulburton, in the county of Orleans and State of New York, have invented a new and useful plan of building canal or river bridges so as to have them swing or automatize on the center from the shore or end abutments or towpath and permit boats to pass each way at the same time without interfering with each other; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1, is a side view of said bridge. Fig. 2, shows the under part of said bridge. Fig. $2\frac{1}{2}$ represents the top-piece of the turn table as secured to the sleepers. Fig. 3 represents the block, or pier with the under-part of turn table, axle, spring, mudsills, block, or pier, the under part of turn-table friction rollers, and axle, or pivot. Fig. 4 represents the spring. Fig. $4\frac{1}{2}$ represents the axle or pivot on which the bridge is secured, and swings, or automatizes.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the first place I lay my mud-sills on which I build the end abutments as represented in Fig. 2. I then build the center pier, or abutment as represented in $3\frac{1}{2}$, in which I secure the axle, or pivot, shown in Fig. $4\frac{1}{2}$. I then place the turn-table on said pier, or abutment, represented in Fig. $2\frac{1}{2}$. I then place the spring represented in Fig. 4 within the turn-table, securing the small spiral to the axle, or some other suitable place. I then proceed to lay the sleepers, represented at Fig. 2 on which to complete the structure, shown at Fig. 1, securing the end of the spring having the grip on it in the center sleeper as near the turn-table as possible to make the bridge swing, or automatize with such other appliances as may seem necessary.

Having thus fully described my invention, I do not claim a swing bridge poised on a center abutment, or pier, so as to revolve on an axis, and leave a waterway on both sides of the pier; as that has been done before. But

What I do claim, as my invention is—

The combination and arrangement of the springs with the bridge, so that the opening and closing of the bridge shall become automatic; and shall not require the attendance of hands to open or close it; as is usual.

JOHN N. KING.

Witnesses:

ELATHAN WILCOX,

JOHN HINES.