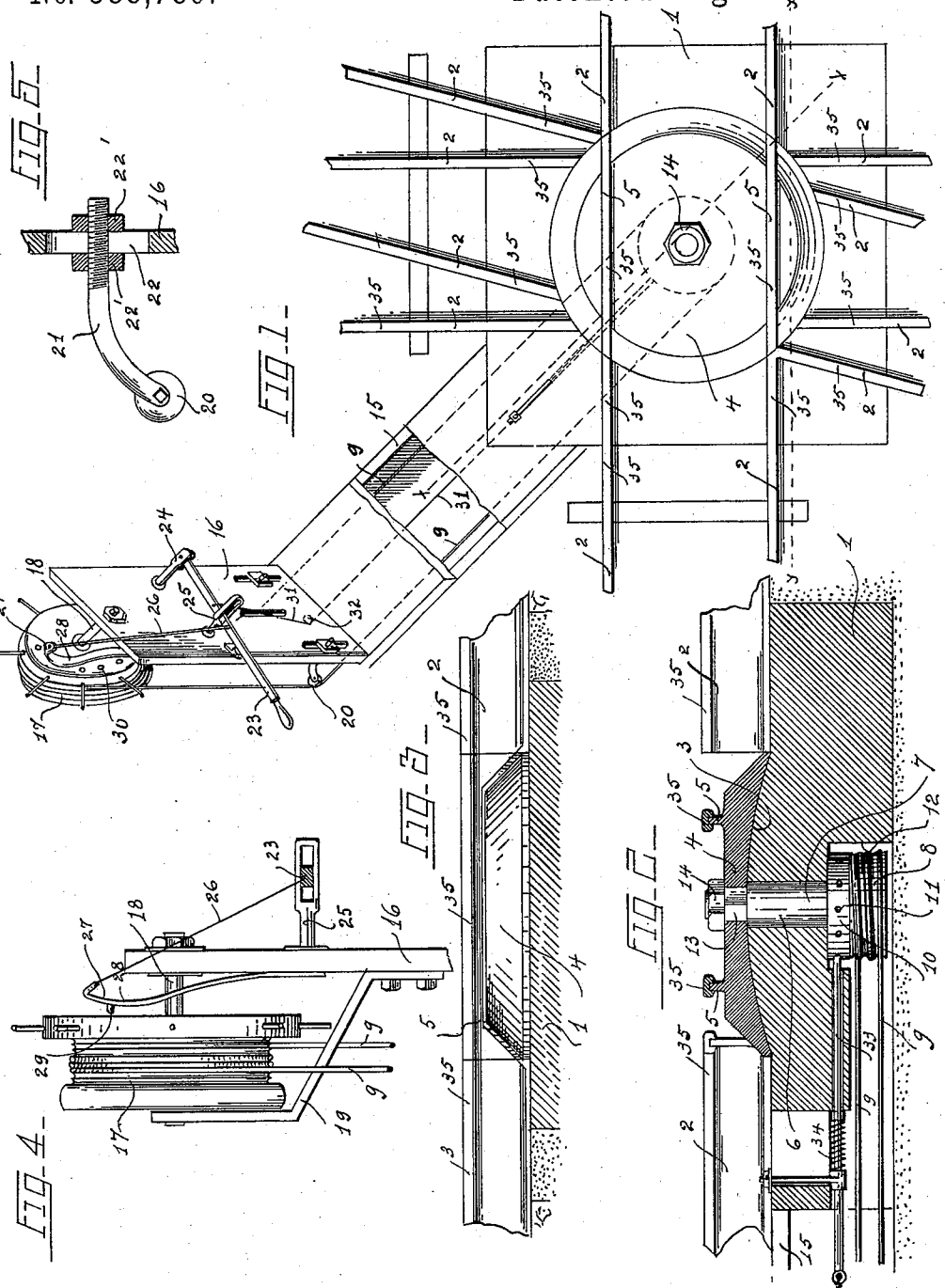
(No Model.)

C. E. BAKER.

RAILROAD CROSSING.

No. 588,789. Patented Aug. 24, 1897.



WITNESSES

H. H. Martin

Maud Schumacher

INVENTOR

Charles E. Baker

By William Webster

Asso Atty

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES E. BAKER, OF BLOOMDALE, OHIO.

RAILROAD-CROSSING.

SPECIFICATION forming part of Letters Patent No. 588,789, dated August 24, 1897.

Application filed January 4, 1897. Serial No. 617,983. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BAKER, a citizen of the United States, and a resident of Bloomdale, in the county of Wood and State of Ohio, have invented a new and useful Improvement in Railroad-Crossings, of which the following is a specification.

My invention relates to a railroad-crossing, and has for its object to provide a turn-table having tracks thereon with convenient means for revolving the turn-table to aline the tracks with any desired tracks diverging from the same, whereby there is formed a continuous track in any desired direction.

A further object is to provide a turn-table adaptable to be brought in coincidence with the main or branch tracks by means of connections with a windlass or drum which may be located at the target-house or at any convenient point with connections with a lever for unlocking the windlass or drum and also the turn-table simultaneously to permit of revolving the turn-table.

A further object is to provide for automatically locking the turn-table in a fixed position and also at the same time automatically locking the windlass or drum from revolution, thereby insuring perfect safety when the tracks of the turn-table are in coincidence with the desired railroad-track.

In the drawings, Figure 1 is a view, partly in plan, showing the divergent rails, the turn-table, and also the bed connecting the turn-table and the standard, the standard being in elevation. Fig. 2 is a longitudinal vertical section on lines $x\ x$, Fig. 1. Fig. 3 is a section on line $y\ y$, Fig. 1, showing the turn-table in elevation. Fig. 4 is an elevation of a portion of the standard, showing the windlass journaled thereon. Fig. 5 is a detail view of one of the adjustable arms in which the grooved idlers are journaled.

1 designates the bed-plate, preferably cast in one piece with divergent rails 2 to coincide with the rails of the road-bed and an arched central portion 3, upon which the turn-table 4 rests. Turn-table 4 is formed with a contour upon the under side to seat upon the portion 3 of the bed and has two rails 5, adapted to be brought into coincidence with any desired rails 2 of the bed by revolving the turn-table.

Centrally of the arched portion 3 is a circular opening 6, in which is journaled a shaft 7, having at its lower end a drum 8, grooved to receive cables 9 and having a plain circular portion 10, having a plurality of perforations 11, the drum being housed properly within a recess 12, formed in the under side of the bed-plate.

Shaft 7 is squared at its upper end, and the turn-table is provided with a rectangular opening 13 to receive the squared end of the shaft, and the turn-table is held to its seat by a nut 14, run upon the upper threaded end of the shaft. By this arrangement the drum and turn-table move in unison.

15 designates a housing from the bed-plate to any desired point from which the turn-table is to be operated, and from the housing is extended vertically a support 16 for a windlass 17, journaled upon a shaft 18 and supported by a brace 19 at its outer end. Wound with one or more turns upon the windlass 17 is a cable 9, which, passing from the windlass, contacts with idler-rollers 20, journaled in adjustable arms 21, secured in the support 16 and adjustable vertically by movability in slots 22 and horizontally by means of nuts 22, run upon the threaded end. By this provision tension may be put upon the cable in any required adjustment. Cable 9 passes within the housing 15 and is wound upon drum 8 with one or more turns, as desired, whereby when the windlass is revolved the turn-table is turned accordingly.

In order to insure perfect safety, it is necessary that the turn-table and windlass shall be locked from revolution when the turn-table is adjusted to the desired tracks.

I have provided for a simultaneous release or locking of the windlass and turn-table by means of a lever 23, pivotally secured in a bifurcated standard 24, attached to support 16 and movable in a keeper 25, secured to the standard. Attached to lever 23 is a cable cord or wire 26, which is connected at its upper end with a locking-dog 27, comprising a spring-plate 28, having a pintle 29 to enter perforations 30, circumferentially arranged in the side of windlass 17, (the spring-plate normally urging the pintle forward,) whereby when the lever is pulled outward the cord or wire pulls upon the spring-plate

and withdraws the pintle, thereby allowing of revolving the windlass. There is also attached to lever 23 a cable 31, which is led over an idler 32 and connected at its opposite end with a locking-bolt 33, normally urged forward by a coiled spring 34 and adapted to enter one of the perforations 11 of drum 8, thereby insuring a simultaneous release of the turn-table and spring-plate as the outward movement of lever 23 retracts the locking-bolt 33.

In order to compensate for wear upon the tracks upon the turn-table and bed-plate, I prefer to cast the tracks of one thickness and supplement the wearing or bearing surface with cap-plates 35, formed with channels upon their under side to receive the rails.

With this amplified description the operation will be apparent. The different rails may be given a number and the perforations in the windlass may be given a corresponding number. With this provision the operator desiring to form a continuous line with any track first moves lever 23 outwardly and at the same time the turn-table, when the windlass is turned until the proper number of track is indicated upon the windlass as opposite the pintle of the plate-spring, and as the pintle enters the perforation in the windlass the locking-bolt enters the proper perforation of the drum 8, thereby simultaneously locking both the windlass and turn-table from revolution.

In order to prevent unauthorized persons from tampering with the crossing, it is only necessary to lock lever 23.

While I have used the term "cable," I may employ sprocket wheels and chains or flexible portions to wind upon the circular portions and intermediate rods or wires.

What I claim is—

1. In a railroad-crossing, a solid bed-plate formed with divergent rails and a central bearing, a turn-table mounted on the bearing, having rails, a shaft journaled in the bed-plate fixedly secured to the turn-table, and having a drum, with means for operating the drum from a location remote from the bed-plate.

2. In a railroad-crossing, a bed-plate, a turn-table, revolubly journaled thereon by means of a shaft, a drum upon the shaft, a windlass, and flexible connections with the windlass and drum, and means for simultaneously locking the windlass and drum.

3. In a railroad-crossing, a bed-plate, a shaft journaled therein, having a drum and locking-face at one end, a turn-table fixedly secured upon the opposite end of the shaft, a flexible connection with the drum, means for exerting tension upon the flexible connections to revolve the drum and turn-table, and a locking-bolt to enter the locking-face.

4. In a railroad-crossing, a bed-plate, a shaft journaled therein, having a drum and locking-face at one end, a turn-table fixedly secured upon the opposite end of the shaft, a windlass having a locking-face, flexible connections with the windlass and drum, locking mechanism adapted to secure the windlass, and also the drum, and means for withdrawing both locking mechanisms simultaneously.

5. In a railroad-crossing, a bed-plate formed with a central curved bearing and radiating rails, a shaft journaled centrally of the bearing, having a drum at its lower end, and a squared portion at its upper end, a turn-table formed with a lower face to fit the bearing, and a squared orifice to receive the shaft, a threaded portion and nut to assemble the parts, and means connected with the drum for revolving the turn-table.

6. In a railroad-crossing, a drum, a windlass, flexible connections with the drum and windlass, arms having idlers over which the flexible connections pass, and means for adjusting the arms to regulate the tension of the flexible connections.

7. In a railroad-crossing, a turn-table, a windlass, flexible connections with the turn-table and windlass, a lever and locking mechanism connected with the turn-table and windlass, whereby a movement of the lever will actuate both simultaneously.

CHARLES E. BAKER.

Witnesses:
CHARLEY ULLERY,
NAPOLEON B. SHUE.