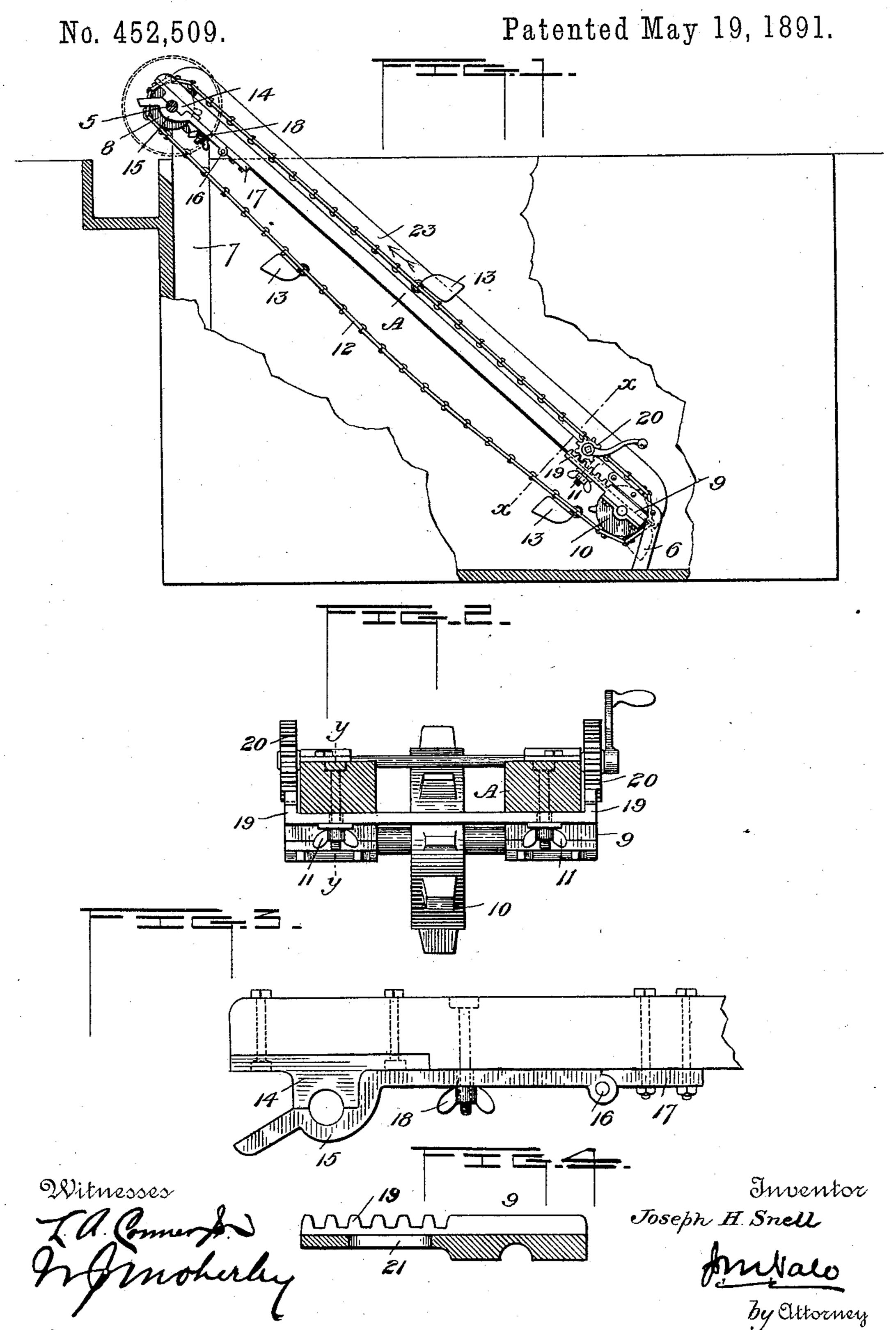
J. H. SNELL.

ELEVATOR FOR REMOVING TAN BARK FROM VATS.



## United States Patent Office.

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## ELEVATOR FOR REMOVING TAN-BARK FROM VATS.

SPECIFICATION forming part of Letters Patent No. 452,509, dated May 19, 1891.

Application filed July 29, 1890. Serial No. 360,331. (No model.)

To all whom it may concern:

Be it known that I, Joseph H. Snell, a citizen of the United States, residing at Athens, in the county of Bradford and State of Pennsylvania, have invented certain new and useful Improvements in Elevators for Removing Tan-Bark from Vats, of which the following is a description.

My invention relates to tanners' tools, and to has for its object the removal of tan-bark

from vats or leaches.

In the drawings, Figure 1 is a side elevation of my machine, partly in section, one of the sides of the inclined way being removed, also part of the leach. Fig. 2 is a sectional view through the lines x of Fig. 1. Fig. 3 is a detail of the journal-box clasp. Fig. 4 is a sectional view through the lines y of Fig. 2. Like letters and figures refer to the same parts throughout the several views.

The inclined way A is loosely attached to the drive-shaft 5 (shown in section in Fig. 1) by means of the journal-box clasps, hereinafter described, on each side of the sprocket-wheel 8 at its upper end, its lower end resting in the leach upon feet or supports 6. The drive-shaft 5 is journaled on standards 7, one of which is shown in Fig. 1, at a suitable dis-

tance above the leach.

Rigidly attached to the drive-shaft is the sprocket-wheel 8, and at the bottom of the inclined way upon the sliding carrier 9 is a similar sprocket-wheel 10, which revolves in the sliding carrier. The sliding carrier is attached to the inclined way by means of the set thumb-screws 11. The sprocket-chain 12, carrying buckets or scoops 13, is passed around the sprocket-wheels engaging them and over and under the inclined way A.

The journal-box clasp (shown in detail in Fig. 3) consists of the upper jaw 14, rigidly attached to the inclined way, and the lower jaw 15, hinged at 16 to the butt 17, also rigidly attached to the inclined way. The lower jaw is held in place and operated by the thumb-screw 18. It is plain that by loosening the thumb-screw the lower jaw will drop and the clasp upon the drive-shaft will be re-

leased. The inclined way may then be removed from the leach. The tension of the 50 sprocket-chain is regulated by means of the ratchet 19, attached to the sliding carrier 9, in engagement with the pinion 20, attached to the inclined way. On releasing the set thumb-screw 11 the sliding carrier 9 may be 55 moved through the extent of slot 21, Fig. 4, along the inclined way in either direction by the rack and pinion, carrying the lower sprocket-wheel with it, making sufficient slack in the sprocket-chain to remove it from engage-60 ment with the sprocket-wheels when desirable.

The operation of the machine is as follows: Power being applied to the drive-shaft 5, sprocket-wheel 8 is revolved, actuating the 65 sprocket-chain which carries the buckets or scoops 13, so arranged as to fill in passing under the lower end of the inclined way and empty in passing over its upper end into discharge-trough 22, located on the outside of 70 the leach or vat under the head of the inclined way, as shown in Fig. 1. The inclined way has removable sides 23, preferably of metal, constructed removable for convenience in changing the location of the machine from 75 leach to leach. It does not matter in what manner contiguous leaches are located with reference to each other for the purpose of operating two or more of the machines in different leaches at the same time, that object 80 being attainable by gearing the power-shaft so as to revolve in the desired direction by any of the well-known means.

Having thus fully described my invention, what I claim, and desire to secure by Letters 85

Patent, is—

In an elevator for removing tan-bark from vats, an adjustable conveying apparatus comprising a frame, a bucket-chain, sprocket-wheels, the upper journal-box having hinged 90 clasps, a slidable carrier, a rack and pinion, and set-screws, substantially as set forth.

JOSEPH H. SNELL.

Witnesses

I. N. EVANS, THOMAS F. FOLEY.