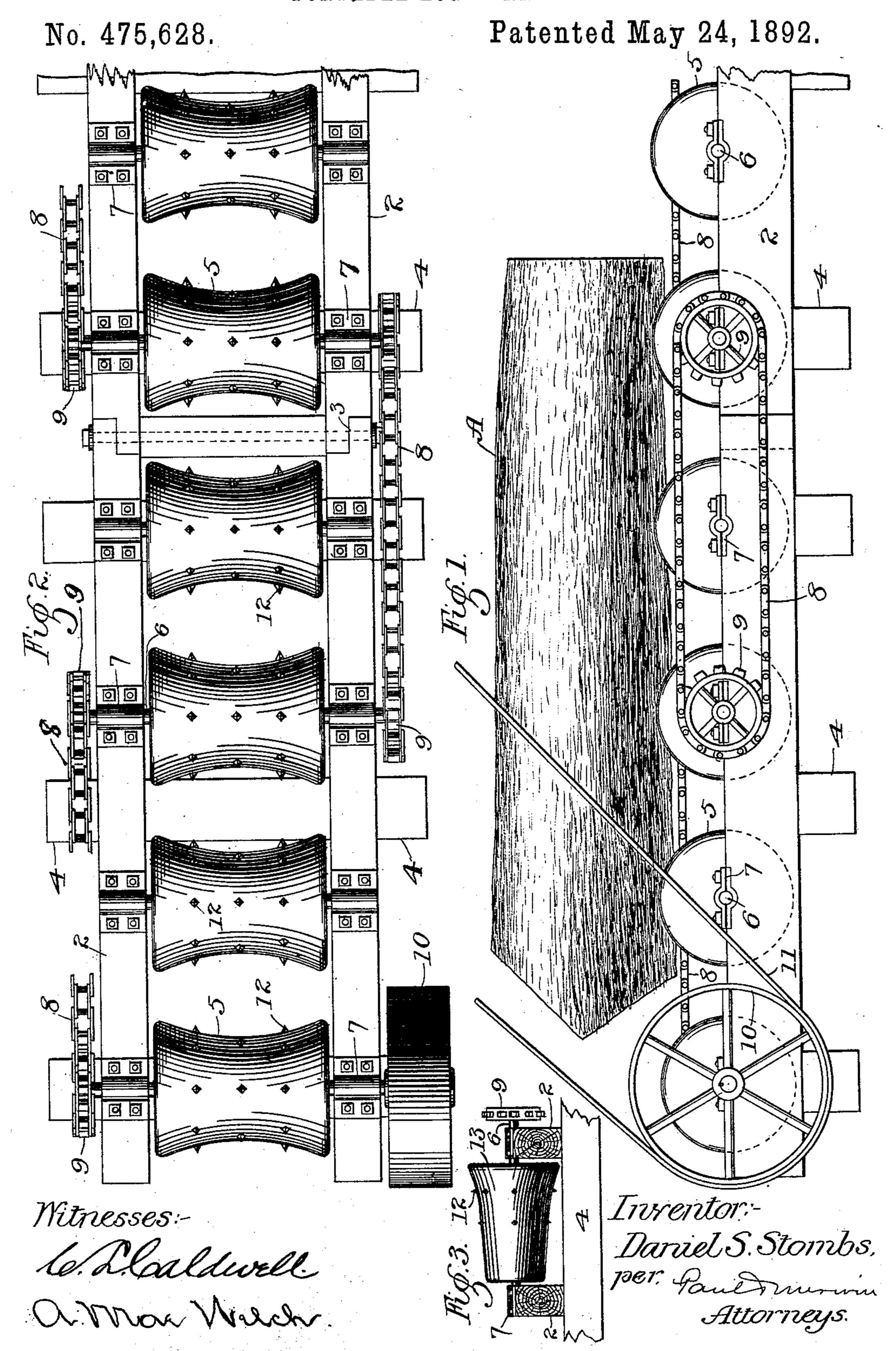
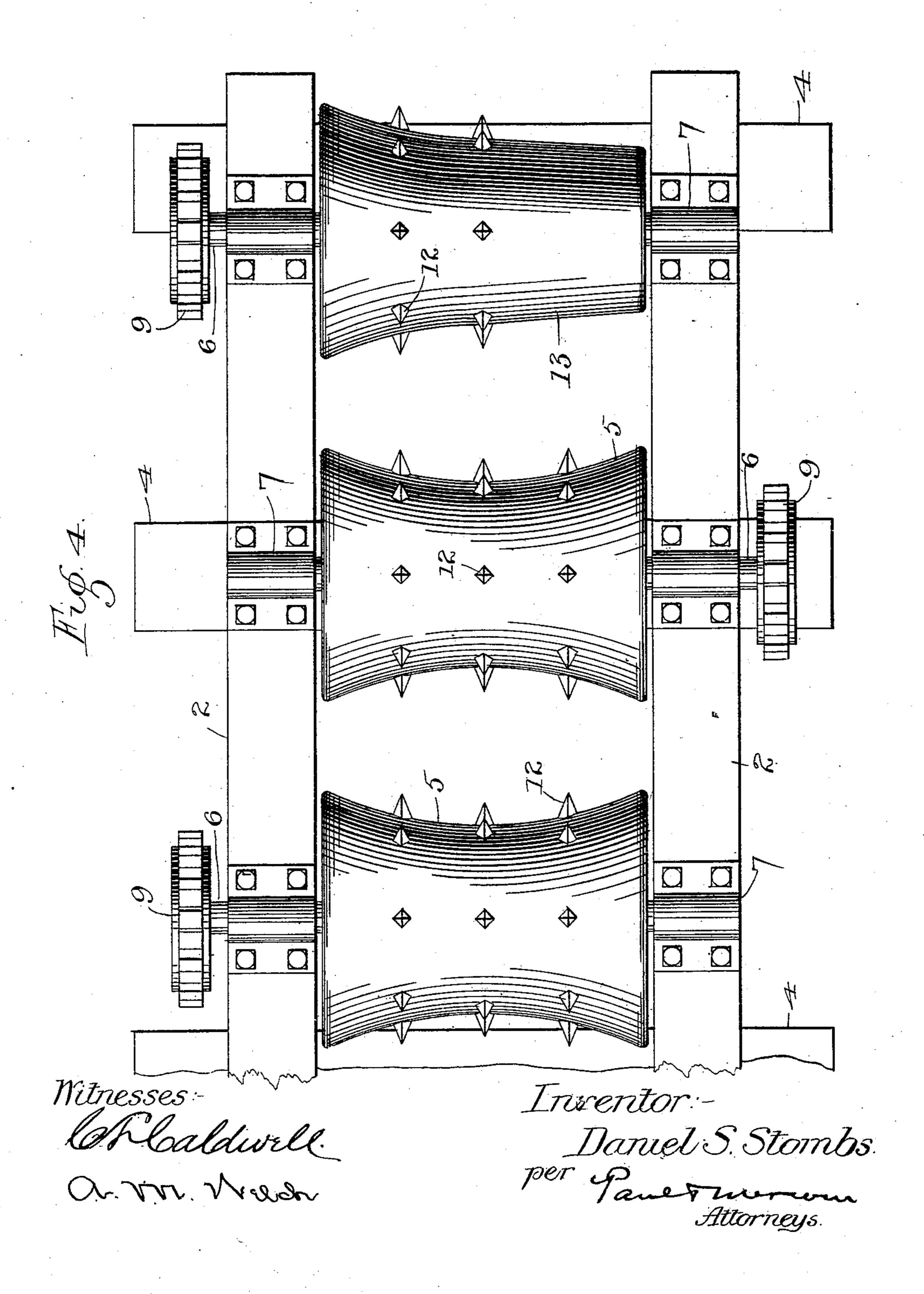
D. S. STOMBS.
PORTABLE LOG CARRIER.



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No. 475,628.

Patented May 24, 1892.



## United States Patent Office.

DANIEL SIMKINS STOMBS, OF STILLWATER, MINNESOTA.

## PORTABLE LOG-CARRIER.

SPECIFICATION forming part of Letters Patent No. 475,628, dated May 24, 1892.

Application filed September 29, 1891. Serial No. 407,199. (No model.)

To all whom it may concern:

Beitknown that I, Daniel Simkins Stombs, of Stillwater, Washington county, Minnesota, have invented certain Improvements in Portable Log-Carriers, of which the following is a specification.

My invention relates to improvements in portable log carriers or carriages designed for the transportation of logs from the point of cutting to a stream or other point of shipment, its object being to provide simple and efficient means for thus conveying the logs at any season of the year by means of any suitable power, such as a steam-engine.

To this end my invention consists in providing a sectional tramway made up of frames of convenient length for transportation and handling, which are arranged end to end in a continuous structure, connecting the points 20 between which transportation is to be made. Transversely of these frames are journaled log-carrying rollers concave in cross-section, provided with spurs or projections upon their concave surface to engage the bark of the logs 25 and prevent their slipping thereon. These rollers are arranged at suitable intervals along the carrier and alternately connected by suitable belts or gears, one or more being connected with a suitable source of power, such 30 as a steam-engine.

Further, my invention consists in the particular construction and combination hereinafter more fully described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a part of my improved carrier, showing the arrangements of the carrying-rollers and their connection with each other and with the source of power. Fig. 2 is a plan view of the same. Fig. 3 is an end elevation of the carrier at its terminus, showing a roller of conical form, with its smaller end free of spurs, by means of which the logs are automatically unloaded; and Fig. 4 is a detail plan view of the end of the tramway, showing the tapering roller.

In the drawings, 2 represents stringers or side timbers of the carrier-frame arranged parallel with each other and suitably connected together, as by cross bars or ties 4. The stringers of one frame are connected end

to end with those of the next frame by any convenient means, such as the cross-bolts 3. These stringers are to be laid upon the surface of the ground, where that is of suitable 55 conformation, or upon other supports to give the carrier suitable grade or slope. Journaled transversely upon these frames are the logcarrying rollers 5, concave in cross-section, their shafts 6 being mounted in bearings 7, 60 secured to the stringers 2, and at such distance apart that a log of ordinary length will bear at all times upon at least two rollers. The rollers are alternately connected by means of link belts 8, running over sprocket-wheels 65 9, carried by the shafts 6, whereby the rollers are arranged in two series, those of one series being all connected together, the alternate ones being idlers. One or more of the rollers, as may be desired, may be connected 70 directly to an engine or other suitable source of power, as by means of a belt-pulley 10, mounted on its shaft and carrying a drivingbelt 11, which runs to the engine. The roller so connected and the others of its series are 75 thus driven directly by the engine, while the idler-rollers are turned merely by the passing logs. The log-carrying rollers are provided with projections or teeth 12, which engage the bark of the logs and prevent their slipping. 80

In order that the logs may be automatically unloaded from the carrier at the terminus, I provide at that point tapering rollers 13 or rollers in the form of conical frustums without teeth on their smaller ends, as shown in 85 detail, Fig. 3. When the log A is carried upon them it will of its own weight slide off at the side of the carrier, where it can be received on skids or otherwise disposed of.

By means of my improved carrier logs can 90 be transported from one point to another over considerable distances in the summer season as well as in the winter at much less cost than that of hauling.

The carrier can be built over ascents and 95 descents and by means of the connection of the rollers with each other carry the logs readily. By the connection between the rollers the driving-power is assisted if part of the tramway is on a decline, the logs tending to 100 run forward of their own weight, turning the supporting-rollers and pulling upon the oth-

ers, thus assisting in the conveyance of other logs up an incline.

I claim—

A sectional log-carrier made up of similar frames arranged end to end, means for detachably connecting them together, the concave rollers journaled transversely on said frames, having spurs upon their concave surfaces, the conical end roller having its reduced end free of spurs, sprocket-wheels upon the

roller-shafts, the link belts connecting the alternate rollers, and means for applying power to drive said belts, substantially as described.

In testimony whereof I have hereunto set my hand this 8th day of August, 1891.

DANIEL SIMKINS STOMBS. [L. s.]

In presence of— H. C. WHITTLESEY, H. W. DAVIS.