

Mine cable hoist for inclined workings consists of two towing wagons with coupled wagon trains, drive station with friction pulley interacting with tow cable, the first towing wagon with a train of wagons coupled to it is mounted on rail track, the second towing wagon with a train of wagons coupled to it is mounted on another rail track with a wider gauge than that of the first rail track, and is located in a vertical plane and coaxial with it in height, the axis of drive friction pulley is horizontal, ends of traction cables are attached to the towing wagons, the lower branch of cable is attached to the first towing wagon. Additional rail track has a transition section, and in section farther from the friction pulley than the transition section, it is inclined at an angle greater than the angle of inclination of the rail track. In section closer to the friction pulley than the bypass, its angle of inclination is less than the angle of inclination of the rail track; furthermore, the section farther from the friction pulley, the bypass section, and the section of the additional rail track closer to the friction pulley are connected by curved sections, the radius of curvature of which is greater than the wheelbase of the second towing wagon and the train of wagons coupled to it, equipped with additional pulley and cable; additional pulley is installed outside the rail track at the opposite end relative to the drive friction pulley, with the ability to move along the rail track, fixed in a predetermined position and rotating about its own axis; cable wraps around the pulley and its ends are attached to the front sections of towing wagons coupled with their respective wagon trains. The upper end of the cable is attached to the last wagon of the second towing wagon; the height of the first towing wagon with the train of wagons coupled to it is less than twice the distance between the bypass and the plane of the rails of both tracks. Rail track is symmetrical to the additional rail track, the lengths of both towing wagons with the wagons coupled to them are equal, and the length of the traction cable is equal to twice the distance from the center of the bypass to the axis of the drive friction pulley, reduced by the length of the wagon train and increased by the product of the radius of the drive pulley and the number π . The second towing wagon and the wagons of its train coupled to it are equipped with axles on which wheels are mounted symmetrically to wagons, whose width is greater than the track gauge; the distance between the inner end faces of the wheels of the second towing wagon and the wagon coupled to it is less than the distance between the rails of the track. The distance between the outer end faces of the wheels is not less than the distance between the outer surfaces of the rails of the additional track.