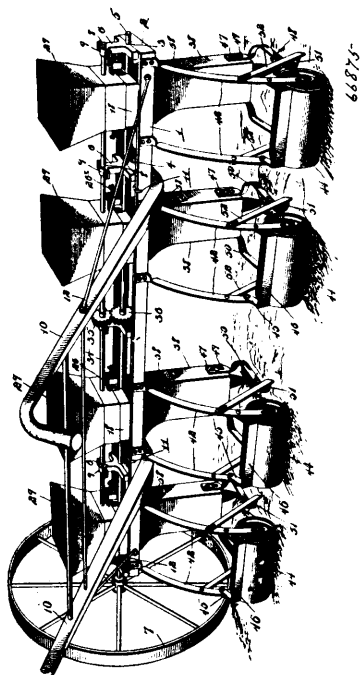


as described. 5th. In a cultivator, the combination of a frame, cutters or billers connected with the frame, a wheeled gauge at the front of the frame, and slide gauges at the rear of the frame, substantially as described.

**No. 66,875. Seed Drill.** (*Semoir en ligne.*)

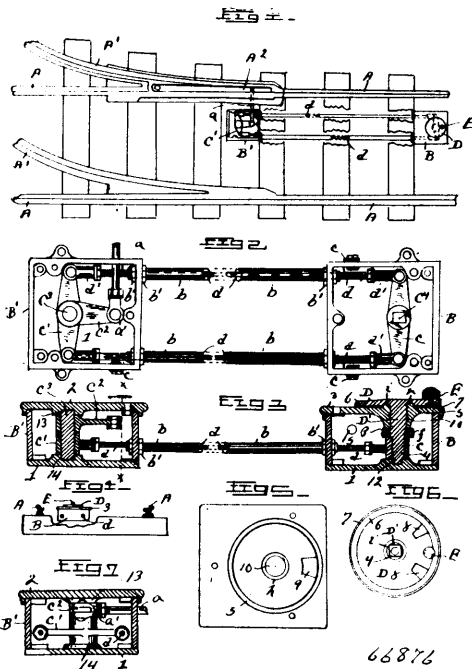


Alexander Theodore Fischer and Edwin Charles Lewis, both of Detroit, Michigan, U.S.A., 2nd April, 1900; 6 years. (Filed 19th March, 1900.)

**Claim.**—1st. In a seed drill, the combination of a frame, hoppers, boots and regulating caps in separable parts and fitted in said frame, agitating and distributing devices for said hoppers, rollers connected to the frame in rear of the boots, and covers between the boots and rollers. 2nd. In a seed drill, the combination of a frame, a drive shaft extending thereover and having distributing cylinders thereon at regular intervals, each provided with pockets of varying dimensions, means for regulating the supply of seed or grain to the said cylinders, hoppers and boots in intimate relation to the cylinders, and means for rotating said cylinders. 3rd. In a seed drill, the combination of a frame, a drive shaft extending thereover, a series of distributing cylinders on the said drive shaft, each having pockets therein of varying dimensions, and means for supplying the grain or seed to the said cylinders and conveying it away therefrom. 4th. In a seed drill, the combination of a series of hoppers, a drive shaft extending therethrough and having distributing cylinders thereon with pockets therein of varying dimensions, regulating caps fitted over the said cylinders and having apertures in the top thereof corresponding in size to the pockets of the cylinders, slides for uncovering or covering the said apertures in the sockets, and means for conveying the seed or grain away from the cylinders. 5th. In a seed drill, the combination of a frame, a drive shaft extending thereover having distributing cylinders thereon provided with pockets of varying dimensions, hoppers and boots fitted in the frame above said cylinders, caps mounted over the cylinders and located within a part of the hoppers, said caps being provided with apertures in the upper portion thereof corresponding in size to the pockets in said cylinders, an agitating shaft extending through the lower portion of the hoppers and having agitators thereon above the caps, and slides for regulating the apertures in the caps. 6th. In a drill, the combination with seed or grain distributing devices, of rollers in rear thereof adapted to be adjusted, and adjustable covers in advance of the rollers and having a lateral extension greater than the width of said rollers. 7th. In a grain drill, the combination of a frame having a series of hoppers therein and boots extending from said hoppers, distributing devices within the hoppers, rollers in rear of the boots having a vertical adjustment, shovels adjustably attached to the lower front portion of the boots, and covers in advance of the rollers and adjustably attached to the supports for said rollers and to said boots. 8th. In a drill, the combination of a frame having end and intermediate bearings, a drive shaft fitted in a part of said frame and said bearings, an agitator shaft in the upper part of the bearings, hoppers through which the agitator shaft extends and fitted over the drive shaft, distributing cylinders on the drive shaft having pockets therein of varying dimensions, regulating caps

within the lower portion of the hoppers and over the distributing cylinders, and provided with top apertures corresponding in size to the pockets in the cylinders, agitators on the agitator shaft and within the hopper above the caps, slides for regulating the apertures in the caps, boots depending from the hoppers and having shovels adjustably connected to the lower portions thereof, and covering devices in rear of the boots. 9th. In a drill, the combination with a frame, hoppers and boots, of bracket arms extending rearwardly from the frame, rollers adjustably mounted in said arms, and covers adjustably connected to the boots, and bracket arms for the rollers and projecting laterally a distance greater than the length of the rollers. 10th. In a seed drill, the combination with hoppers and boots, of a shaft having distributing cylinders thereon provided with pockets varying in dimensions, and caps mounted over said rollers having regular apertures in the top thereof which align with the pockets in the cylinders.

**No. 66,876. Railway Switch.** (*Aiguille de chemin de fer.*)



Walter Scott Phelps, Muncie, Indiana, U.S.A., 2nd April, 1900; 6 years. (Filed 19th March, 1900.)

**Claim.**—1st. A railway switch provided with a case and a vertical shaft journaled in the case and provided with a horizontal disc working upon the top of the case, a vertical contact pin secured to the disc, and a lever detachably secured to the vertical shaft within the case and operatively connected to the switch. 2nd. A switch operating mechanism comprising a pair of connected cases, connected levers mounted in the cases, a rod connecting the switch point with a lever in one of the cases, a crank pin connected with the lever in the other case, a trip bar and a guide bar therefor acting upon the rail or like stable element and mounted movably upon a motor or equivalent vehicle, and means whereby the trip bar may be actuated to form contact with the crank pin for operating the switch. 3rd. A switch operating mechanism comprising a lever having a vertical crank pin and having connection with a switch point, a trip bar and a guide bar therefor acting upon the rail or like stable element and mounted movably upon the motor vehicle, and a lever whereby the trip bar may be shifted to form contact with the crank pin for operating the switch. 4th. A switch operating mechanism comprising a lever having a vertical crank pin and suitably mounted in the roadway and connected to control the switch, a trip bar mounted upon a motor, a compression beam controlled by the trip bar, a guide bar actuated by the compression beam and provided with a roller, springs whereby the trip bar and the guide bar are normally retained in inactive position, levers whereby the trip bar is actuated to connect with the crank pin to operate the switch and whereby the guide bar is forced into contact with the rail to limit the movement of the trip bar whereby the same is prevented from interfering with obstructions. 5th. A switch operating mechanism comprising a laterally moving lever having a vertical contact pin and to which the switch is connected, and a vertically movable trip bar adapted to engage with the contact pin and controlled in its vertical movement downward by means acting against the railway rail as a gauge whereby accurate adjustment for contact with the pin is obtained. 6th. A railway switch provided with a case having an annular bearing upon the top thereof and a lever