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J. E. G., of R. I.—As your article repeats very nearly the ideas of your former communication we do not publish it.

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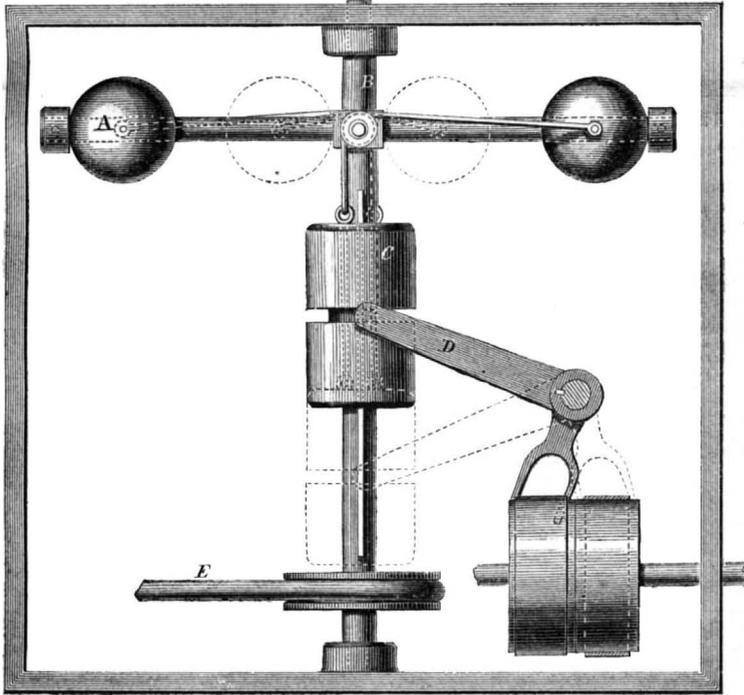
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Zur Beachtung für deutsche Erfinder. Die Unterzeichneten haben eine Anleihe, die Erfindern das Verbalten angibt, um sich ihre Patente zu sichern, herauszugeben, und verabfolgen solche gratis an dieselben. Erfinder, welche nicht mit der englischen Sprache befaßt sind, können ihre Mittheilungen in der deutschen Sprache machen. Süssigen von Erfindungen mit kurzen, beuüthig gezeichneten Zeichnungen beliebe man zu adressiren an Munn & Co., 37 Park Row, New-York. Auf der Office wird deutsch gesprochen. Dieselbst ist zu haben: Die Patent-Gesetze der Vereinigten Staaten, nebst den Regeln und der Geschäftsordnung der Patent-Office und Anleitungen für den Erfinder, um sich Patente zu sichern, in den Ver. Staaten sowohl als in Europa. Ferner Zusätze aus den Patent-Gesetzen fremder Länder und darauf bezügliche Nachschläge; ebenfalls nützliche Winke für Erfinder und solche, welche Patente zu erlangen. Preis 20 Cts., per Post 25 Cts.

Improved Fulling-mill Stop-motion.

When cloth is passed through the rolls of rotary fulling mills it has a tendency to twist and knot before it reaches the rolls, so that the upper, or pressure roll, stops, thus causing a tearing motion which injures the cloth. The object of this invention is to construct a stop motion so that when the cloth shall get knotted the belt will be thrown off the mill instantly, and thus preserve the cloth from injury. This action is obtained by connecting the balls, A, on the arms of the spindle, B, by cords to a weight, C. The groove in this weight carries the lever, D, which has a forked arm to ship the belt with. When these balls are revolved at a high velocity by the belt, E, they

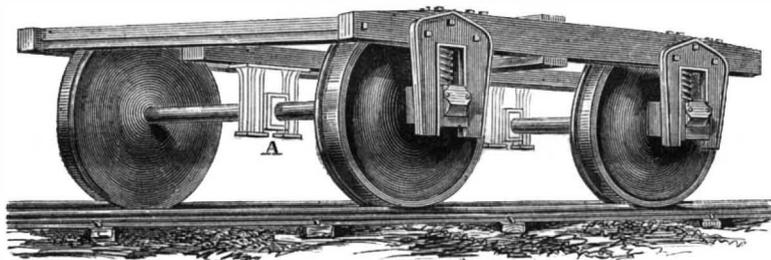
**STOTT'S FULLING-MILL STOP-MOTION.**

fly out on the arms and hold the weight, C, on the fast pulley; but when the velocity of the spindle is decreased by the cloth catching in the rollers, the balls run in and the weight, C, drops; thus throwing the belt from the fast to the loose pulley, and stopping the mill. As the belt driving the spindle is connected with the fulling mill, any variation of speed in it will instantly be felt by the balls, which will run in toward the center, as shown by the dotted lines, and effect the result alluded to. This renders the fulling mill self-acting as regards the cloth, and it is obviously a useful improvement.

Patented Aug. 30th, 1864, by Benjamin Stott, of Westerly, R. I., from whom all further information can be had.

Improved Railway Truck.

The object of this invention is to reduce the resistances encountered by the ordinary truck in travers-

**FROST'S RAILWAY TRUCK.**

ing curves and other irregularities of track, whether of alignment or surface. In this improved truck the flange tends constantly away from the rail; dragging of the wheels, in rounding curves or passing uneven parts of the track, is effectually obviated. The manifest results are diminished wear and tear of track and rolling stock, and economy in the use of the motive power—all cardinal points in operating railways. The simple modification necessary to adapt all ordinary patterns of trucks to this plan may in part be comprehended from the engraving. At A the only additional parts employed are shown: other differ-

ences are in dimension only, and the whole may be explained by a brief reference to devices heretofore invented for the same purpose, and the causes of their failing to answer. In one, the wheels were made independent of each other, so that the outer wheel, in rounding curves, might turn oftener than the inner, in proportion to the greater length of the outer rail. This arrangement failed, because the axles were fixed permanently in one position, the front axle parallel to that behind. A common wagon, so built, could not be turned round on a common road, it would have to be dragged round. Moreover, there was nothing in this arrangement to carry the flange clear of the rail; after contact it might be expected

to crowd against it. In coning the tread of the wheels, so as to make the periphery next to the flange greater than at the opposite edge of the tread, inventors have approached the true solution of the problem. A simple pair of wheels, with coned tread and fixed in the ordinary way upon the axle, constitutes beyond doubt a self-guiding system. But when two are coupled together, with the two axles confined in rigid frames, each operates to control the other, as explained in the case of loose wheels.

In the truck which the engraving illustrates, the truck frame is made to carry a pedestal and friction box for each axle centrally placed, through which the impelling power is transmitted to the axles and wheels, in a manner not controlling the directions they may strive to assume. The guiding power of the coned tread will infallibly and constantly direct the flange away from the rail. A curve or unevenness in the track may tend to produce contact, but

its effect will be counteracted in less than a single revolution; and in traversing the curve the outer wheel will run upon the periphery which corresponds to the greater length of its journey. Proper dimensions are then to be assigned to the friction boxes bearing the load, and the pedestals in which they work, to admit of free play, within certain limits of direction, to the axles. Assuming ordinary proportions, and supposing truck and alignment perfect, a curvature of 300 feet radius may be overcome by the improved truck, without grinding a flange or dragging a wheel. In like manner accidental inequali-

ties of surface or alignment will be overcome, whenever they occur, with the minimum wear and tear and waste of motive power. This invention was patented on the 13th of May, 1862. Liberal terms will be made with any railway company disposed to establish, by a full and extended trial, the real value of this invention. Address the inventor, Edward Frost, Civil Engineer, Station H, New York Post-office.

SINGULAR CATASTROPHE.—An accident of a most singular character occurred on the Chicago Burlington and Quincy Railroad, a few nights ago, attended with fatal results. A locomotive was standing upon the track at one o'clock at night. Why it was there, in a place of such imminent danger, at such an hour, it is impossible to conjecture. But the most singular part of the story is, that two trains, one from the West, and the other from the East, plunged into this luckless locomotive at the same moment of time, smashing all three of the locomotives and cars, and killing some twelve or fifteen passengers. At the point where the collision took place the road is perfectly straight and level for miles, and the catastrophe is one of the most remarkable on record.

THE

Scientific American,**FOR 1864!**

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