

DEVICE FOR FEEDING AND WATERING CATTLE.

CARS.

Every now and again we see in the daily press statements concerning the suffering of cattle in transit over our railroads, There can be no doubt but that the cattle do suffer much and the meat must lose much in quantity and not less in quality. An English butcher has recently patented a device by means of which much of this misery and loss may be obviated. It is hardly necessary to state that if such an apparatus be deemed essential in England it must be much more so in this country where the journeys are many times longer and where our single lines cause much more detention on the road, We commend the idea to the consideration of the Society for the Prevention of Cruelty to Animals.

The hay rack, b, and the water trough, a, are suspended at the end of a balanced lever, c (seen in both our illustrations, which we reprint from the *Practical Magazine*). Water is turned on at g_1 till the weight of the trough overbalances the counterpoise, e, and descends to the required level. When the animals are well refreshed, the cock, 4, is opened, the remainder of the water flows away, and the troughs rise out of the way. | and compels the company to pay him 60,000 dols.

FEEDING AND WATERING CATTLE ON RAILROAD | Our engravings show the complete apparatus in use with an open car (Fig. 1) and a closed car (Fig. 2). The cost for apparatus to feed 30 cars of cattle at once is

estimated, by a firm of engineers, to be \$4,260, a moderate outlay, considering the permanent value of the appliances, and the greatly improved condition of the stock.

THE ST. LOUIS BRIDGE.—The iron work is now complete, two weeks in advance of the contract time. A grand banquet has been given by the Keystone Bridge Co., contractors, to their employees, some 200 in number, at the Grand Central Hotel. The approaches will now be hastened to completion, railroad tracks laid, and carriage ways finished as speedily as possible; and the indications are that the bridge will be thrown open to public traffic at a much earlier day than was anticipated.

The original patent for metallic tips for shoes was sold for 100 dols., and the company which bought it became wealthy. Now, upon its expiration, the inventor has obtained its renewal,