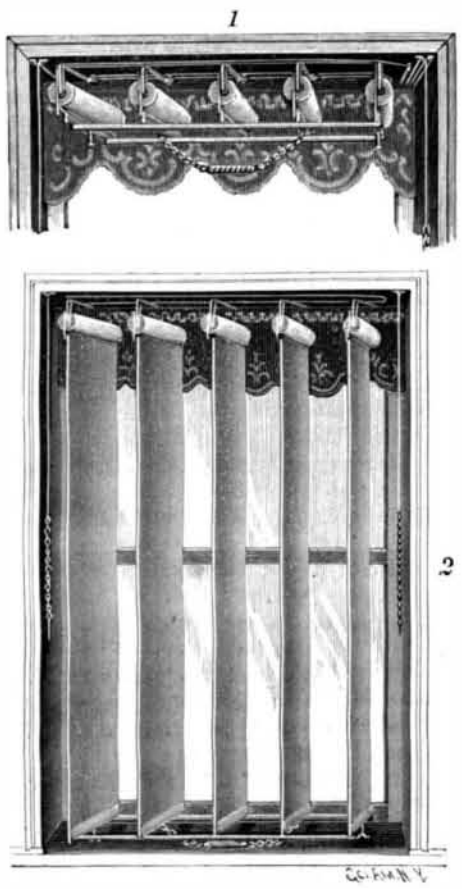
AN IMPROVED WINDOW SHADE.

The shade shown in the illustration consists of a series of sections, each capable of movement to or from an adjoining section, all of the sections being simultaneously adjusted in a simple and easy manner. The improvement has been patented by Mr. Joseph Eckert, of No. 1127 Park Avenue, New York City. In

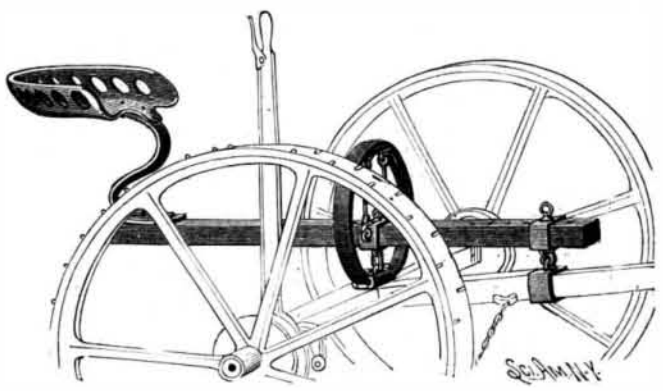


ECKERT'S WINDOW SHADE.

Fig. 1 all the shade sections are drawn up and stand at right angles to the window, and in Fig. 2 they are down and held at a slight inclination, to regulate the admission of light and air. Projecting from a rod journaled at the top of the window frame is a series of U-shaped guides, and in a socket in the window frame over each guide is journaled a hanger or bracket whose lower horizontal member carries a drum or hollow spring curtain roller, the tendency of the spring being to maintain the shade section rolled up, although the shade remains in such position as it is placed when pulled down. A cord at one side of the window is connected with the pawls of all the spring rollers, and by drawing upon the cord the various shade sections will be simultaneously raised by their several springs. Each hanger or bracket is held normally in a position to overlap the other by a spring coiled around its upper member in the socket, but in order that the shade sections may be carried to any desired angle, a bar pivotally connected with and extending across the upper horizontal members of the hangers is connected by a link with a cord extending over pulleys and down at one side of the window, the lower end of the cord having open links or loops for engagement with a button on the window frame. When this cord is left free the springs controlling the brackets cause the shade sections to overlap each other and stop the admission of light as would a one-piece shade. The bottom rails of the shade sections are connected together at their inner and outer ends by pivotally attached longitudinal bars.

A SWINGING SEAT FOR AGRICULTURAL IMPLEMENTS.

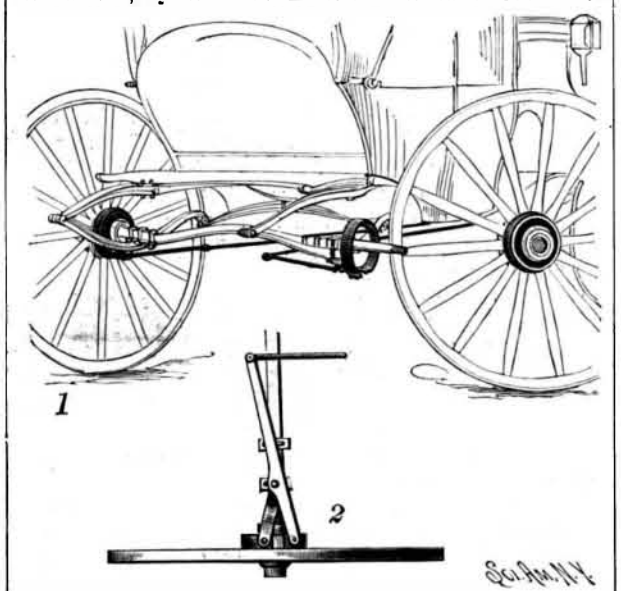
A seat in which the motion of the machine and the inequalities of the ground will be but little felt, the seat being also adjustable to suit riders of different weights, has been patented by Mr. Louis Beyer, Jr., of Calumet Harbor, Wis. Mounted on either the front or rear axle is a hoop or bow spring, through which passes a seat beam supporting the seat on a spring shank at its rear end, the forward end of the beam passing through a sleeve connected by a link to a sleeve on the tongue or on the reach. The upper sleeve has a set screw or pin to enter one of several holes in the seat beam, and the sleeves are adjusted backward or forward according to the weight carried in the seat. The seat beam is suspended in the hoop spring by links, whose upper ends have eyes secured to horizontal segmental meshing gears journaled in the upper portion of the hoop spring, one of the gears having a handle. By moving the gears to carry the upper ends of the links together to the center of the spring, which the rider may do without leaving his seat, a pendulum springing swing movement is obtained, designed to counteract any unevenness in hill work, the vertical position of the links being designed to afford ample elasticity in ordinary rough ground, retaining the seat essentially level and unaffected by the motion of the machine.



BEYER'S AGRICULTURAL MACHINE SEAT.

A CARRIAGE AND WAGON BRAKE.

A convenient and readily attachable brake device, which may be applied without interfering with any of the usual running gear, is represented in the accompanying illustration. It has been patented by Mr. Henry C. Chamberlin, of Lanesborough, Pa. Fig. 1 shows the application of the device on a carriage, Fig. 2 representing the connection of the brake band lever with a link whose other end is connected with a lever in reach of the driver. Attached to the wheel spokes by a clamping plate, and surrounding the vehicle hub, is a friction hub, with cylindrical flange to afford a friction bearing, and on the axle is clamped a bracket arm on which is pivoted a lever, to whose outer end is attached one end of a friction band, adapted to surround the friction hub, the other end of the band being affixed to the rear end of the bracket arm, which extends under the hub. It will be readily seen that the driver, by the movement of a hand or foot lever



CHAMBERLIN'S BRAKE.

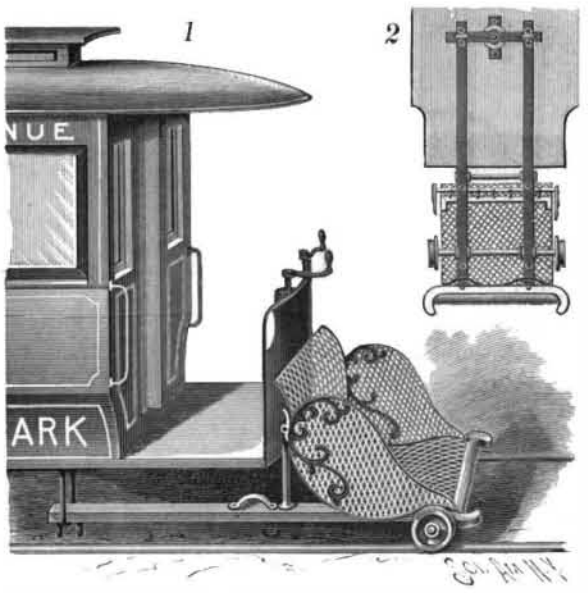
connected with the other end of the link which extends to the brake lever, will draw the friction band closely around the friction hub to retard or stop the wheel.

English Patents.

It appears from the twelfth report of the comptroller-general of patents, designs, and trade marks that last year 25,386 patents, 21,230 single designs, and 8,013 trade marks were applied for, the number of patent applications being the largest in the group, though this was not the case with regard to the other figures. Of the 25,000 odd patent applications, 500, or 2 per cent, were made by women, about 100 being inventions connected with articles of dress. The number of readers frequenting the Patent Office library showed an advance upon the previous year, 113,374 persons having availed themselves of its use.

AN AUTOMATIC LIFE GUARD FOR CARS.

This is a device designed to prevent the injury of any one, child or adult, who may be caught in the path of a moving car, by picking up and safely carrying the individual until the car is brought to a standstill, the body being so caught and held in an elastically suspended basket that contact with the drawhead, dashboard or wheels is impossible. The improvement has been patented by Miss Clara M. Beebe, of Elmira, N. Y. Connected by means of semi-elliptical springs, with arms which extend beneath the car, is a forward buffer having curved arms at its ends and a pneumatic cushion across the front, the device being shown applied to a car in Fig. 1, and Fig. 2 representing a bottom plan view. The arms extending beneath the car are braced by cross rods, one of which serves as an axle for front guide wheels, and on the rear ends of the arms are staples engaging loop-like hangers secured to a transverse swivel plate, which has a central bearing plate fastened between the car timbers, so that in rounding a curve the apparatus carried by the buffer arms has a free movement in front of the car. Uprights secured to the buffer arms in front of the dashboard carry a transverse rod from which is suspended, by means of springs, a cross bar to which is secured the frame of a wire basket having a curved or dishing bottom, and supported near its front edge by curved springs fastened to the buffer arms, the basket being thus yield-



BEEBE'S AUTOMATIC LIFE GUARD FOR CARS.

ingly supported at the back and at its lower front end. Handles on the buffer arms facilitate the shifting of the device from one end of the car to the other. In a patent which has been applied for, the inventor provides a further improvement designed to pick up a person prostrate on the track, without rolling the body along, the device being called into instant use by a touch of the motorman's foot, and as quickly withdrawn when no longer needed.

Hydrogen Peroxide as a Preservative.

According to Barbi (Pharm. Centralh., vol. xxxvi, p. 307), hydrogen peroxide is one of the best, least harmful and most convenient agents for preserving sirups, wine, beer, cider and vinegar. For this purpose 10 gm. (2½ fl. dr.) of the commercial peroxide of hydrogen may be added to each liter (say one quart) of the article to be preserved.

A HAND CRIMPING TOOL.

To quickly and firmly crimp a cap on an oil can or other receptacle, the simple hand tool shown in the engraving has been patented by Mr. John Wood, of Seventh Street and Jackson Avenue, Long Island City, N. Y. The tool is represented in use in one of the views, the other view showing the caps employed and a section of a can top with its cap crimped on. A flanged crimping disk is adjustably mounted to rotate loosely on the lower end of a stock in which is a pivot on which are fulcrumed two hand levers, the lower end of one lever carrying a crimping roll which rotates and slides loosely, and the other lever having a forked lower end adapting it to similarly carry two crimping rolls. Each crimping roll has an annular flange, and is held down by a coiled spring to press upon the annular flange of the crimping disk, the springs normally exerting a pressure on the lower ends of the levers to move their handles apart. When the cap is placed on top of the can and the tool applied, as shown in the illustration, the hand levers are in an outermost posi-

WOOD'S HAND CRIMPING TOOL.

tion and the crimping rolls do not touch the flange of the cap; but on pressing the handles together the crimping rolls move inwardly, and their flanges travel on the flanges of the crimping disk, causing the flange of the cap to turn in under the flaring mouth of the spout, the operator at the same time turning the tool to crimp the cap in place all around.