RECENTLY PATENTED INVENTIONS. Electrical Devices,

ELECTRIC STOP-MOTION FOR WARPING-MACHINES .- J. COCKER and C. DENN, Philadelphia, Pa. The object of this invention is to provide an improved electric stop-motion for warping-machines arranged to form a permanent fixture of warping-machine and adapted to stop the motion in case a yarn or thread breaks and prevent the manufacture of imperfect goods.

ELECTRIC-RAILWAY PLOW. — J. H. AKERS, Washington, D. C. This plow can be inserted into or withdrawn from the slot of the underground conduit at any point along the slot, for examination and repairs without having to wait until the car is run over apit. It provides for the movement of the car forward or backward and is adapted to pass over breaks in the conductor-rails at crossings without damage to the plow and the plow may be conveniently and safely lifted into or taken out of the slot at the same time preserving its freedom of movement for turning curves.

Heating.

AIR-HEATER .- J. WATERHOUSE, New York, N. Y. The invention relates to improvements in machines for heating or reheating compressed air to be used in drying material in machines, as shown in two prior patents granted Mr. Waterhouse—although the invention is not confined to the devices shown in may be easily regulated to the desired temperature for the material under treatment.

Machines and Mechanical Devices.

TRIMMING-MACHINE.—N. M. SCHUSTER Kirksville, Mo. The aim of this inventor is to provide a machine more especially designed for trimming wall-paper and the like and arranged to insure an accurate trimming of the roll at a high velocity and to allow of adjusting the roll according to the width of the margin and while the machine is in opera-

SPEAKING FIGURE .-- G. W. SPENCER and A. Lynde, Atlantic City, N. J. In this patent the invention has reference to acoustics; and its object is to provide a new and improved speaking figure arranged to emit articulate speech, songs, and the like and move the eyes and lips to closely imitate a human being. The record-cylinders are provided with subject matter for speeches, songs, and the like.

FELT-SPREADER.-J. H. OSTRANDER, Ticonderoga, N. Y. Mr. Ostrander's invention relates to improvements in devices for spreading any web of wool, cotton, or paper, and is especially adapted for paper-pulp and papermachine felts, an object being to provide a spreader that may be readily attached to a machine and which will spread the paper-carrying felt. A further object is to make the device adjustable, whereby it is possible to prevent the felt or paper sheet from creasing or wrinkling while traveling over the spreader.

APPARATUS FOR TREATING YARN.—H. LINDENBERG, West Hoboken, N. J. In carrying out this invention the object in view is the provision of a machine upon which the yarn to be treated is placed and held under tension while it is rotating and while subjected to a bath of suitable chemical and subsequently to a cleansing-bath. A vat or tank is provided designed to contain solutions in which the yarn is to be immersed, such tank being rotatably movable and vertically adjustable relative to the yarn-carrying devices.

HOISTING DEVICE FOR LIVE STOCK.-L. W. Johnson, Jerome Junction, Arizona Mr. Johnson's invention relates to hoist ing devices or mechanism. The improvements are intended more especially for use in loading cars with live stock. A movable gangway of special construction is employed for enabling the stock to pass thereonto which may rest on the ground or other surface of the pen from which stock may be taken, and in connection with said gangway hoisting devices are employed for elevating the gangway, to gether with a load of stock, to a convenient height to enable the latter to pass into the

MACHINE FOR TRIMMING AND APPLY-ING SHADE GOODS.—E. O. ENGBERG, Salt Lake City, Utah. This invention relates to a machine by which the fabric used for windowshades may be slit at its edges to produce lengths, the machine simultaneously creasing stock, so as to facilitate the application to the lower edge thereof of the usual slat, and the machine, further, having means for carrying the shade-roller and for rotating the same during the operation of the machine, whereby automatically to wind the shade on

Of Interest to Farmers.

COTTON-CHOPPER.—T. J. LOWRY, Mountairy, N. C. The invention relates to improve ments in cotton choppers and cultivating devices. In the present instance Mr. Lowry contemplates the provision of a machine or a device of the class described in which the chopping mechanism may be raised and lowered to put the same into and out of operation at the will of the operator. The mechanism may be held or retained by the operator in any desired position of adjustment.

COMBINED HEADER AND STACKER.—J. H. KINDSVATER, Manhattan, Kan. The improvement is directed to a machine for heading and stacking the grain. The machine is equipped with means for adjusting the cutter apparatus and for throwing it into and out of gear, with power devices for bodily elevating the receiver or barge by the movement of the portable apparatus, with means for tilting the raised barge, for guiding during tilting, and for braking the descent of the barge unloaded and with a horizontal conveyer, which is shiftable relatively to the barge, so that it may be moved out of the way previous to elevation of the barge.

HOISTING MECHANISM FOR STACKERS. —J. H. Kindsvater, Ellis, Kan. The subject-matter of this application constitutes in part a division of a prior application filed by Mr. Kindsvater. The present improvements are directed to a means for slidably guiding the upand-down movement of the barge and permitting the same when raised to have a tilting movement to discharge the load, to means for hoisting the loaded barge by the movement of the machine, and to devices whereby the hoisting mechanism and barge may be controlled by a single operation.

TOPPER AND STRIPPER FOR CANE-HARVESTERS .- G. D. Luce, New Orleans, La. The present invention refers to improve ments in topping and stripping mechanism de-signed to be used in connection with a sugarcane harvester, an object being to provide a mechanism of this character by means of the patents, the object being to provide a mechanism of this character by means of heater of simple construction, in which heat which the cane may be quickly topped and stripped of leaves and the stalk conveyed to a cart or wagon.

Pertaining to Vehicles.

DEVICE FOR PREVENTING SHAFT-MO-TION IN VEHICLES .- W. N. CLEVELAND, Dover Ky. In the present case the invention relates more particularly to devices used on vehicles for preventing shaft motion $\operatorname{\textbf{d}} \operatorname{\textbf{ue}}$ to the vertical movement of the horse. Further, it relates to means whereby the seat of the vehicle may be inclined at slightly different angles, relatively to the vehicle-body, for the purpose of compensating grades over which the vehicle travels, thereby maintaining the seat substantially level.

Railways and Their Accessories.

RAILWAY-SWITCH .- T. E. GUMMERSON, Crestone, Col. The usual construction of frog is $\boldsymbol{\textbf{d}} one \ away \ with in this instance and in its$ stead a swinging rail is used. The object of the improvement is to do away with the usual frog and to produce a simple switch, one that can readily be installed, removed, or repaired and that is sure in its operation and not affected by sleet, snow, mud, or dust. The device is a safety appliance, as there will be no danger of a person getting a foot caught, as is quite common with the ordinary switchfrogs.

Steam Engineering.

HEATING AND CONDENSING FEED-PUMP.-W. TATE, Greensboro, N. C. The invention resides in a peculiar attachment to pumps, providing steam-condensing and waterheating means, the pumps being adapted for drawing the water from a supply thereof and forcing it, after passage through the heating means, into a steam-boiler or a storage-tank, from which it may be conveyed and used according to conditions and the purpose of its The invention is specially adapted for use. use With double-acting pumps, though it may be modified, adapting it to be used with singleacting pumps.

EXHAUST-NOZZLE.-W. S. CLARKSON, Livingston, Mont. The prime object of Mr. Clarkson's invention is to keep the exhaust from each side of the engine independent, so that the exhaust from one engine will not tend to create back pressure on the other engine and to cause the exhaust-steam to be equally dis- of the Mexican type, to effect adjustable contributed through the smoke-stack, thus bringing about an even and uniform draft within.

ENGINE.-C. F. CHANDLER, Orange, N. J. In this patent the invention has reference to engines in which the motive agent acts simultaneously on two pistons to cause the same to advance toward and to recede from each other. The object of the improvement is the provision of an engine arranged to utilize the motive agent to the fullest advantage.

ROD-PACKING .- N. H. ALBRECHT, Columbus, Ga. The inventor provides packing-blocks in pairs, fitted slidably together, and a cage having radial mortises in which the blocks operate, the cage being fitted within a retaining band and the latter, with the cage in place, being then fitted within a casing having means for retaining the packing devices at one side and means for holding them at the other side, the latter means being provided with openings for passage of steam between a retaining-band and the casing, the band having openings opposite radial mortises in a carrier, so steam may force the packing-blocks against the rod.

Of General Interest.

BARREL-TAP.-H. FESENFELD. Hoquiam. Wash. In this patent the improvement relates to beer apparatus having gas or air pressure in the barrel for forcing the liquid from the pictures. SLOPE-STAKE ATTACHMENT FOR ENfrom 4 to 20 cans of polish, paste, powder, etc., at one
faucet at a bar or other place. The object is GINEERS' TRANSITS.—W. G. RUSSELL, Rustime.

driving of the tap into the bung-hole without of the transit-telescope, having a level underinjury to the tap or supply-pipe and without neath and provided with a graduated vertical waste of the liquid.

WEATHER-STRIP .-- H. EAGON, New Comtion consists of the construction and arrangement of parts automatically operating upon closure of the door to provide effective packing whereby rain, wind, dust, and cold air are prevented entrance through such opening as may be between the door and carpet-strip or door-sill.

FASTENING DEVICE FOR DRILL-BITS OR THE LIKE .- C. P. BRINTZINGHOFFER Howard, Kan. The improvements in this case are intended more especially for use in curing drill-bits to the stems or stocks therefor, it being known that in operations of boroil and similar wells difficulty and loss of time are occasioned by the loosening of the drills on their stems or else by disconnection and loss of the same within the well. One of the principal objects of this invention is to overcome these difficulties.

VENTILATOR .- F. J. PROCHASKA. Park River, N. D. The purpose in the present case is to provide a ventilator adapted for use in connection with buildings; and which when pened will afford a direct draft and which when closed will be wind, snow, rain, and dust proof, and further to so construct the ventilator that the body or ventilating tube will be unobstructed and so that the ingress of flies or other insects to the tube will be pre vented.

LINE-CHALKING DEVICE.—F. M. THOMP son, East Liverpool, Ohio. Mr. Thompson provides a simple device by which to chalk the line, including the casing having a body for the reeling mechanism, a chamber for the chalk, means of controlling communication between the said chamber and reel-chamber, and means for controlling the outlet for the line from the chalking-chamber, as well as means for preventing clogging of the chalk within the chamber. It may be carried in the pocket and used immediately.

GARMENT-SUPPORTER.-L. E. SCHOCH. Chicago, III. The object of the improvement is to provide a supporter, more especially designed as a suspender or as a hose-supporter which is arranged to insure ready self-adjustment of the parts on the wearer bending the body, to give the utmost comfort to the wearer, and to reduce the strain on the webbing and other parts to a minimum.

BOLTING-SIEVE CLEANER. -Shultz, Portland, Ore. In this patent the invention has for its object the provision of a novel simple traveler-block of peculiar form adapted to be moved freely in all directions over the surface of bolting cloth by the ordinary jar of the working machine, and thus prevent the reticulations of the fabric from becoming clogged and rendered defective in service.

COMBINATION BRIDGE AND TAIL-PIECE.—E. REACH, Jersey City, N. J. This application is a division of a former application filed by Mr. Reach. The invention relates to mandolins, guitars, zithers, violins, and other like stringed instruments, and its object is to provide a bridge and tailpiece arranged for attachment to the belly of the instrument and to allow the interchange of bridges of a high or low character, according to the requi ements of the instrument.

BIRD-CAGE.—J. A. QUELCH, New York, N. Y. The purpose in this instance is to provide in connection with a cage a paper-roll holder, whereby the paper-covering for the cage-bottom | may be conveniently and quickly changed or renewed, and another purpose is to provide a novel means for distributing gravel on the paper as it is drawn through the cage.

BUCKLE .- A. Addington, Cedarville, Cal. The invention refers to buckles especially for use in connection with saddles, particularly nection between the latigo and cinch and also between the reata-strap and latigo; and the purpose is to construct a simple buckle and one of great strength, and which can be operated to effect the adjustment of the main strap-a latigo, for example-and which when the strap is adjusted therein will also hold the strap firmly in adjusted position.

TOOL FOR PYROGRAPHIC WORK.—Z. | Inquiry No. 5332.—For makers of highway truss Tyssowska. Chicago, Ill. In a patent the inventor described a combination tool adapted to be used as a burner and a scorcher at the same time, the scorcher portion serving, in addition to its own function, as a chimney for the burner portion, and the burner portion, in addition to its own function, serving as a heater for the jet of gases delivered by the scorcher portion. The present application shows a nozzle device as a separate article of manufacture applicable to any ordinary pyrographic point or tool and by which many advantages may be easily ob-

PUZZLE.-L. VAN PUTTEN. Holland, Mich. The object in this case is to provide a puzzle relating to games and toys which is simple, cheap to manufacture, and provided with revoluble picture-blocks to be brought in such relative position to each other by the operator that the pictures will form complete sets of

to provide a tap arranged to permit convenient sels, Kan. The device is attached to the axis arc or circle and clamp and tangent screws applied in the usual way. The objects are to erstown, Ohio. This weather-strip is of that effect the setting of slope-stakes of embank-type known as "hinge-acting;" and the inven-ment, and cuts in railroad or other work without the use of the Wye level and without any calculations and with much greater speed than can be made by ordinary methods.

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