Scientific American.

ENGINEERING INVENTIONS.

A stuffing box has been patented by Mr. Erastus G. Medrick, of Middletown, N. Y. It has wedge-shaped packing rings held in a gland and oper ated on by a piston fitting steam tight, a ring surrounding the wedge-shaped packing rings, the invention being especially adapted for steam cylinders and steam chests.

A safety water gauge has been patented by Mr. Peter Barclay, of Winthrop, Mass. This invention covers a construction whereby the valves connecting a boiler with the glass sight tube will close automatically, and prevent the outward passage of steam and water, in case the sight tube should be accidentally broken.

A railroad rail has been patented by Mr. Samuel M. Jacobs, of New York City. It is designed more particularly for street railways, and is made with a lengthwise groove, and with lower or bottom recesses at intervals into which the groove opens, forming a guide to peripherally toothed or flanged car wheels, and being practically self-clearing of dirt.

A car brake has been patented by Mr. Edward B. Warren, of Plankinton, Dakota Ter. Combined with the brake levers is a swinging gear plate, a gear wheel on the axle, and means for throwing the gear plate in and out of gear, and other novel features, the brake being controllable from the locomotive, and being efficient when the train is moving forward or backward, in a straight line or on curves. The patent embraces the large number of twenty-four separate claims.

AGRICULTURAL INVENTION.

A combined plow and harrow has been patented by Mr. William P. Clark, of Elberton, Ga. The invention covers an implement having interchange able parts which may be bolted together to form an A or V harrow, a right or left side harrow, or a cultivating plow.

MISCELLANEOUS INVENTIONS.

A button has been patented by Mr. Pierre A. Raymond, of Grenoble, France. It is a spring buttond esigned especially as a glove fastener the invention covering an improved construction of a similar button formerly patented by the same inventor.

A perfumed artificial flower has been patented by Mr. Solon Palmer, of New York City. It has a pervious receptacle adapted to contain a perfuming powder and concealed within the petals of the flower, the stem of the flower extending into the mouth of the receptacle.

A galvanic battery has been patented by Mr. Horatio J. Brewer, of New York City. The invention consists of a method of filling and packing the electro-negative material in a bag tightly around the carbon electrode, and maintaining a firm contact between the electrode and the electro-negative material.

A pendulum level has been patented by Mr. Oscar B. Fuller, of Bnrlington, Kansas. This invention relates to angle-measuring implements where in a pendulous bob determines the vertical line, and affords a simple and improved construction, to increase their sensitiveness and accuracy and to render then more convenient in use.

A churn dasher has been patented by Mr. Lewis D. Bunce, of Salt Lake City, Utah Ter The dasher blades are secured on a vertical dasher shaft by means of radial wings projecting from the shaft, the wings being formed on the shaft at a small cost, and forming a simple and efficient means of secur ing the blades thereto.

An inhaler has been patented by Messrs. Edgar S. Werner, of New York City, and John P. S. Gifford, of Chatham, N. Y. It has a easing with inhaling and exhaling tubes, and provided upon the inside with a coiled wire for holding sponges out of contact with the interior of the casing, in combination with mouth and nostril tubes connected to the casing.

A pavement has been patented by Mr. Elwin A. Snow, of Jacksonville, N. Y. It is preferably made of cast iron, and consists of a series of plates or blocks, with supporting bars on their under surface, with means for locking the plates together, making a pavement which can be readily and quickly laid, and will be durable and self-supporting over nneven ground, ditches, etc.

A machine for printing oil cloths, etc., has been patented by Mr. George Davison, Jr., of Brooklyn, N. Y. The invention covers a novel construction and combination of parts for a machine capable of printing any number of colors upon any width cloth, and in which the print rollers are made sectional upon a central shaft, whereby they may be 010

which the lumber rests and is moved away, in connection with various novel features.

A water heater has been patented by Mr. Henry Stutsman, of East Portland, Oregon. It is for use in connection with stoves, ranges, etc., and combines with a reservoir a cylinder connected at top and bottom therewith, the cylinder having radial tubes, etc., to provide for heating a large quantity of water, and give a good circulation thereto, without any extra expenditure of heat.

A wagon end gate has been patented by Messrs. Robert R. Tichenor and Philetus Walker, of Henning, Minn. The side boards of the wagon have apertured plates, with flanges on their rear edges, and threaded shanks on their lower ends extending through the bottom of the wagon, and there are other novel features, so that the end gate may be readily removed and replaced, and will securely bind the ends of the side boards of the box.

A cactus singer has been patented by Mr. Ernest W. Vacher, of Derby, Texas. It is an apparatus which can be conveniently carried, and has an oil reservoir and a burner with a wire cloth to which just sufficient oil is supplied for each occasion of use, the flame being forced out through a narrow opening of the burner to a height of two feet if desired, the device being iuexpensive, and one which can be used without danger.

A machine for forming veneer drums has been patented by Messrs. Wilson Godfrey and George W. Halstead, of Brooklyn, N. Y. The invention consists of the combination with a forming cylinder of two curved jaws adapted to fold the veneer around it, means for lifting the forming cylinder, which is formed with a recess combined with special clamping mechanism for binding the lapped edges of the veneer. with other novel features.

A cloth-cutting machine has been patented by Mr. Thomas W. Parshall, of Brooklyn, N. Y. It consists of a very thin endless belt knife mounted in a light base and upright, motion being communicated by a light belt from a flexible shaft or otherwise, the opposite sides of the belt blade running close together in opposite directions, and the base being made of convenient shape to be slipped readily under a pile of cloth to be cut, the edges of which are thus brought agains the two opposite moving edges of the belt knife,

A gas regulator has been patented by Mr. Cary Pattrell, of Derrick City, Pa. Combined with a T coupling, having a valve seat to one side of its inlet opening, is an expansible casing connected to the end of the coupling opposite the valve seat, a stuffing opposite the valve seat, a stuffing box in alignment with the valve seat, and a screw stem passing through the stuffing box and casing into the coupling, with other novel features, for automatically regulating the quantity and pressure of the gas.

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- 5. Drawing in perspective, with floor plans, for a Cottage costing Thirty-five Hundred Dollars.
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- 17. Design of the Yankee Cottage now at the American E hibition, London.
- 18. Design for Elegant Residence of C. C. Bloom-field, Esq., Jackson, Mich. Two half page drawings, showing view in stair hall, perspect-ive, and floor plans.
- 19. Interior view of Stable with horizontal floors and hygienic drainage. Three illustrations.
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A documental file has been patented by Mr. John M. Willis, of New York City. It has separable front and back flaps and a number of detachable backs of variable widths for connecting and holding the flaps at different distances apart. rendering documents inaccessible to dust, moisture, etc., and being particularly adapted to receive and preserve legal documents.

A magnetic register connection for water meters has been patented by Messrs. Albert S. Dietzman and George Cressey, of Louisville, Ky. This invention utilizes a permanent magnet moving in the waterwiththe mechanism of the meter, and influencing, through the walls of the case, an armature with contacts controlling an electric circuit ontside of the meter case.

A lumber assorter has been patented by Messrs. Horace B. Phillips and William M. Whaley, of Suffolk, Va. The machine comprises a series of guideways with receiving ends near the trimming saws, and extending away to separate points of delivery, the guideways having actuated rollers at the bottom, upon Pa., U.S.A.

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