

ENGINEERING INVENTIONS.

A car axle box has been patented by Mr. Stephen R. Stinard, of Pompton, N. J. The invention consists in fitting a tray having inclined or sloping side walls into the axle box below the axle journal, whereby the setting oiled waste will be forced or crowded against the axle journal and the lubricant be retained in the tray.

A metallic packing has been patented by Messrs. William E. and Frederick G. Brockett, of Park City, Utah Ter. It consists of a gland-like packing ring with lubricant-holding groove combined with fractional packing rings having sloping backs and grooves or recesses, in connection with a special form of stuffing box, being specially adapted for piston rods, valve stems, expansion joints for pipes, etc.

A railway train timer has been patented by Mr. George W. Housel, of Bloomsbury, N. J. This invention covers a special construction of clock and auxiliary features designed to indicate to engineers or trainmen when the last train passed the indicator, as well as the time of day, so that the engineer may know by a glance at the instrument the exact time between his train and the one preceding him.

A splice bar for railroad rails has been patented by Mr. Jonas Potter, of Morrellville, Pa. It consists of a plate with a central chair and end chairs, the rail having its base cut away to the face of the web at each side to form opposite rabbets in the base at the end, and recesses beyond the rabbets, making an economical and effective means of splicing the rails and securing them to the sleepers.

AGRICULTURAL INVENTIONS.

A combined potato digging and harvesting machine has been patented by Mr. Arthur P. W. Wade, of Cedar City, Mo. This invention covers a novel construction, combination, and arrangement of parts in a machine by which the potatoes are plowed out of the ground, separated from the dirt and sticks, and transferred to a wagon or dropped in a row alongside the machine.

A double cutter bar has been patented by Mr. William T. Wardall, of near Manly Junction, Iowa. Combined with two cutter bars and their cutters a spacing strip is arranged between the sections of the finger bar and formed with slots through which the connecting bolts pass, making a double cutter bar which will not clog, and with the parts so constructed that the cutters may be adjusted to operate in the most effective position.

MISCELLANEOUS INVENTIONS.

A curry comb has been patented by Mr. William R. Adams, of Omaha, Neb. The body portion has one toothed face and one plain face, the handle device being held adjustably to the body to allow either face to be used, the handle device consisting of a leather plate and a rubber strip.

A saw gauge has been patented by Mr. Edward S. Nixon, of near Chattanooga, Tenn. It is a novel device which can be readily applied to, a block or board, to be sawed, and held firmly in place thereon, to accurately guide the saw in the direction in which the block or board is to be cut.

A churn has been patented by Mr. William W. Perkins, of Palouse, Washington Ter. A cup-shaped dasher is journaled to rotate in a cream vessel, the dasher having a closed top, a bottom opening and side port, with a radial wing or piston operating when the dasher is rotated to force the cream through the port, and thus cause the butter to come quickly.

A combined mail bag fastener and tag holder has been patented by Mr. Henry N. Ockford, of Jackson, Mich. The body portion has a cross pin and a clamp for holding the mail bag ropes, and a tag holder with an eye to receive the pin of the fastener, with other novel features, for conveniently locking the bag and carrying its indicator tag.

A boot or shoe stretcher has been patented by Mr. Lloyd Nottingham, of Norfolk, Va. It is adapted for stretching a boot or shoe in length as well as width and in the instep portion, the invention covering a novel construction and adaptation of parts, whereby also the stretcher may be used in stretching two boots or shoes at the same time with one screw.

The manufacture of white lead forms the subject of a patent issued to Mr. William P. Talbot, of Brooklyn, N. Y. The invention covers an improved article of manufacture, being a circular lead buckle cast on one face with blade-like ridges on opposite sides of the diameter of the buckle, whereby the ribs will be quickly corroded with the body of the buckle.

A sleigh shoe has been patented by Mr. George A. Stevens, of Hartsville, Mass. It is of that class having a dovetailed groove in its inner face for receiving the bolt for securing the shoe to the runner, the invention covering the formation of the groove and the combination therewith of a bushing of suitable relative shape.

A spirit level has been patented by Mr. Enos F. St. John, of Highland Station, Mich. It consists of a circular tube partially filled with spirit or other proper liquid, mounted in connection with a semicircular graduated plate, whereby the instrument may be used for obtaining level or perpendicular lines or intermediate angles.

A kitchen cabinet has been patented by Mr. John G. Shaffer, of Clay City, Ind. It consists of a case with extension cupboard having centrally hung or pivoted safes, each with semicircular sides and back, the safes being adapted to discharge their contents without the use of a scoop or other means usually employed for that purpose.

A chain wrench has been patented by Mr. William H. Brock, of Brooklyn, N. Y. It is a pipe wrench of novel make, designed to give greater ease in applying the wrench to the pipe, the getting of a firmer

and more manageable grip, while making a strong wrench and one which can easily be repaired or parts replaced when worn.

A felly bolt has been patented by Mr. Duncan W. McKinnon, of North Sydney, Cape Breton, Nova Scotia, Canada. The bolt and nut are formed with re-enforcing sections, the head of the bolt being nicked after the manner of an ordinary wood screw, making an improved bolt for preventing the splitting of the fellyes without detracting from their appearance.

A floor jack has been patented by Mr. John L. Fredericks, of La Grangeville, N. Y. Combined with a brace bar having a spur and head adapted to be struck by a mallet is a pivoted lever and a push bar pivoted to the lever with a series of notches on its under edge, a block pivotally attached to its free end, with a link connecting the push and brace bars.

A conduit for electric conductors has been patented by Mr. Edward E. Greene, of New York City. Its sections are designed to replace and serve as the ordinary curb, and are cast or moulded in iron, artificial stone, or other suitable material, ducts for the conducting cables extending longitudinally through the sections, making a conduit which can be cheaply and easily laid, and affording ready access to the conductors.

A mop wringer and scrubbing brush holder has been patented by Messrs. Zotique R. La Fleche and Joseph A. Ledoux, of Concordia, Kansas. It is so made that the mop may be wrung by winding it upon a roller by means of a small crank, while the brush, pivoted in short arms, may be clamped in any desired position, the device being simple, convenient, and effective.

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Excavator, G. Cox.....	375,132	Pavement, asphalt, J. Stansfield.....	375,018	Telephone exchange, mechanical, W. H. Eastman.....	375,316		
Excavator, G. Cox.....	375,132	Pencil sharpener, J. Seymour.....	375,009	Telephone, mechanical, Eastman & Adams.....	375,315		
Excavator, G. Cox.....	375,132	Pencils, compass attachment for, C. W. Boman.....	375,257	Temperature indicator, distant, C. G. Short.....	375,208		
Excavator, G. Cox.....	375,132	Photographic accessory, J. W. Tinsman.....	375,230	Thermo electric generator, E. G. Acheson.....	375,242, 375,243		
Excavator, G. Cox.....	375,132	Photographic backgrounds, supporting frame for, for, L. W. Seavey.....	375,006	Thill coupling, C. Stilwell.....	375,230		
Excavator, G. Cox.....	375,132	Photographic negative plate, C. H. Tonndorff.....	375,231	Thread and winding it into cops, machine for waxing, D. H. Campbell.....	374,935		
Excavator, G. Cox.....	375,132	Piano for action, upright, E. Q. Norton.....	375,237	Tie, See Railway tie.			
Excavator, G. Cox.....	375,132	Piano tuning pin, F. E. H. Goodenow.....	375,150	Tiles for sidewalks, etc., manufacture of illuminating, T. Sharts.....	375,101		
Excavator, G. Cox.....	375,132	Picture holder, E. Pachtmann.....	375,189	Tilting chair, J. W. Kenna.....	374,971		
Excavator, G. Cox.....	375,132	Pigment, white, J. B. Freeman.....	375,000	Tilting chairiron, J. W. Kenna.....	374,970		
Excavator, G. Cox.....	375,132	Pile or pier, C. Delafeld.....	374,944	Tire, vehicle, W. Fox.....	375,381		
Excavator, G. Cox.....	375,132	Pin, See Piano tuning pin.		Toaster or meat broiler, bread, Harkins & Willis.....	375,288		
Excavator, G. Cox.....	375,132	Pipe, See Tobacco pipe.		Tobacco pipe, W. M. Eccles.....	375,140		
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Excavator, G. Cox.....	375,132	Pipes, etc., apparatus for carbonizing cement, J. H. Walsh.....	375,234	Tool holder, C. Francis.....	375,059		
Excavator, G. Cox.....	375,132	Pipes, reducing the ends of, E. O. Daniels.....	375,050	Torpedo, railway, J. H. Bevington.....	375,254		
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Excavator, G. Cox.....	375,132	Planter, hand corn, E. J. Hamby.....	375,286	Transoms, etc., pivotal support for, W. P. Davis.....	375,051		
Excavator, G. Cox.....	375,132	Plow attachment, E. G. Goddard.....	375,283	Trap, See Fish trap.			
Excavator, G. Cox.....	375,132	Plow, lister, E. P. Lynch.....	375,081	Tricycle, A. E. McEntee.....	375,176		
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Excavator, G. Cox.....	375,132	Press, See Baling press. Cider press. Dough press.		Tubes, manufacture of metallic, J. L. Bogert.....	375,043		
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Excavator, G. Cox.....	375,132	Pump, J. J. O'Connell.....	375,202	Type writing machine, Garner & Leganke.....	375,062		
Excavator, G. Cox.....	375,132	Pump, B. C. Vanduzen.....	375,027	Type writing machine, A. Mills.....	375,178		
Excavator, G. Cox.....	375,132	Pump motor, railway, W. Tiffany.....	375,024	Valve, automatic safety, Wallace & Wyman, Jr.....	375,029		
Excavator, G. Cox.....	375,132	Punch and register, ticket, Kimpton & Crisp.....	374,973	Valve, engine, J. H. Elward.....	375,144		
Excavator, G. Cox.....	375,132	Railway, cable, J. B. Heverling.....	375,230	Valve, steam-actuated, G. T. Parnell.....	375,091		
Excavator, G. Cox.....	375,132	Railway grip, cable, J. B. Heverling.....	375,963	Vehicle boot, Youtsey & Higgin.....	375,113		
Excavator, G. Cox.....	375,132	Railway rails, fish plate for, W. B. Chisolm.....	375,124	Vehicle gear, E. A. Gardiner.....	375,148		
Excavator, G. Cox.....	375,132	Railway rails, splice bar for, J. Potter.....	375,193	Vehicle running gear, S. N. Belgium.....	375,023		
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Excavator, G. Cox.....	375,132	Railway switch, R. W. Cloud.....	375,048	Vehicle, two-wheeled, Hare & Sprout.....	375,287		
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Excavator, G. Cox.....	375,132	Saddle and yoke, combined cart, T. Ivey.....	375,182	Waterproof fabrics, making rubber striped, T. H. Videto.....	375,234		
Excavator, G. Cox.....	375,132	Sash balance, J. Bastian.....	375,252	Weather vane, L. W. Schauffuss.....	375,201		
Excavator, G. Cox.....	375,132	Saw, buck, J. F. French.....	375,061	Weighing apparatus, grain, G. P. Jameson.....	375,163		
Excavator, G. Cox.....	375,132	Saw, drag, F. N. Pepperling.....	375,187	Welding, electric, E. Thomson.....	375,022		
Excavator, G. Cox.....	375,132	Saw gauge, E. S. Nixon.....	375,187	Wheel, See Car wheel.			
Excavator, G. Cox.....	375,132	Sawmills, slide block for reciprocating, E. Haake.....	374,285	Wheel, J. Dunstedter.....	375,056		
Excavator, G. Cox.....	375,132	Saw set, C. Morrill.....	375,088	Whiffletree hook, I. C. Burgett.....	374,982		
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Excavator, G. Cox.....	375,132	Screw blanks, device for holding and guiding, C. D. Rogers.....	375,097	Wire springs, machine for making coiled, C. Graham.....	375,064		
Excavator, G. Cox.....	375,132	Screw bolt, E. D. Shelton.....	375,206	Wire stretcher, J. B. Cleaveland.....	375,127		
Excavator, G. Cox.....	375,132	Screws, die for swaging the points and threads of wood, C. D. Rogers.....	375,098	Wood splitting and chopping machine, T. P. Chen.....	375,122		
Excavator, G. Cox.....	375,132	Screws, self-adjusting die for swaging wood, C. D. Rogers.....	375,099	Wrench, See Chain wrench.			
Excavator, G. Cox.....	375,132	Seeder or grain planter, E. P. M. Robinson.....	375,198	Wrench, H. Bowhall.....	374,928		
Excavator, G. Cox.....	375,132	Seeding machine, J. B. Williams.....	375,056	Wrench, J. M. Haynes.....	375,155		
Excavator, G. Cox.....	375,132	Separator, See Grain separator. Liquid separator.		Wringer, See Mop wringer.			
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Excavator, G. Cox.....	375,132	Sewing machine motor brake, W. Naab.....	375,184				
Excavator, G. Cox.....	375,132	Sewing machine shuttle, D. H. Campbell.....	374,987				
Excavator, G. Cox.....	375,132	Sewing machine tension device, F. Meyer et al.....	374,986				
Excavator, G. Cox.....	375,132	Sewing machine, wax thread, D. H. Campbell.....	374,934				
Excavator, G. Cox.....	375,132	Sewing machines, take-up device for wax thread, D. H. Campbell.....	374,936				
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Excavator, G. Cox.....	375,132	Shelving, movable, F. V. Comfort.....	375,123				
Excavator, G. Cox.....	375,132	Shingle machine, J. P. Ferrenburg.....	374,963				
Excavator, G. Cox.....	375,132	Shirt stretcher, E. H. Iveson.....	375,069				
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Excavator, G. Cox.....	375,132	Shoe shank burnisher, L. C. Kenton.....	374,972				
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Excavator, G. Cox.....	375,132	Shutter fastener, F. B. Mallory.....	374,981				
Excavator, G. Cox.....	375,132	Shutter worker, E. F. Goodwin.....	375,151				
Excavator, G. Cox.....	375,132	Signal, See Railway signal.					
Excavator, G. Cox.....	375,132	Signal box, M. Martin.....	375,083				
Excavator, G. Cox.....	375,132	Sled, J. H. Elward.....	375,145				
Excavator, G. Cox.....	375,132	Sleigh, W. Schaub.....	375,003				
Excavator, G. Cox.....	375,132	Sleigh shoe, G. A. Stevens.....	375,214				
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