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Ninerals sent for examination should be distinctly marked or labeled.

(6625) R. M. J. says: Can you give the formula for a cement for cloth? A. Use thin sheet gutta percha, which can be purchased of the manufacturers, especially for tailors' use. Place a piece of the tissue between the layers of cloth to be cemented and press with a hot iron. This causes the cloth to firmly ad here on account of the melting of the gutta percha.

(6626) E. E. R.—The compound leaf sent by Mr. E. E. Roberts, of Winthrop Harbor, Illinois, is that of the Kentucky coffee tree (Gymnocladus cana densis). It is a slender tree with rather large bipinnate leaves, not uncommon in the We and South and closely related to the uncommon honey locust. The generic name refers to the stout branches destitute of spray or thorns. It belongs to the pulse family and the pod is woody, pulpy within, with from 6 to 8 large compressed bony

(6627) C. W. S. asks: 1. In gasoline engines is gasoline vaporized or atomized when injected into the cylinder ready to be fired? A. Gasoline vaporizes at ordinary temperatures with a moderate evaporating surface with a pressure of from one to two inches of water, which is sufficient to cause the vapor to flow through a pipe to the cylinder, where it is drawn in with the proper proportion of air by the movement of the pis-2. Is compressed air used to atomize the gasoline if that is the form it is injected into the cylinder? A The gasoline is not atomized by compression. This method is not reliable. 3. What test gasoline is generally used? A Gasoline of 0.65 to 0.70 specific gravity (water 1) is used. 4. For 10 hours' work, one horse power actual, how much gasoline is used and its cost per gallon? A. About one pint of gasoline per brake horse power per hour, at a cost of about 15 cents per gallon. 5. What generally force chamber at one time for a one horse power? A. One part gasoline vapor to 10 parts air is the best proportion drawn in by the piston to the extent of from 1/4 to 1/4 of the stroke. 6. How or by what principle is the inflamed gasoline prevented from passing from piston chamber hack into the supply pipe? A. By a sliding port valve which controls the inlet and exhaust. 7. In building a motor to propel a carriage, what would be the weight of two cylinders of two horse power each? This is to in clude only the piston rod, etc., and frame of sufficient strength to support them. A. The gasoline motor must have a fly wheel and for 2 horse power should weigh 300 pounds. 8. Would four metal wheels the size of ordinary carriage wheels and constructed similar to bicycle wheels only of slightly heavier material, be sufficient to sustain combined weight of frame, cylinders, and four to six adults? A. Wheels should be heavier than ordinary carriage wheels. A complete motor carriage for six per sons would weigh 1400 pounds. 9. Are pneumatic tires of sufficient strength to withstand such a pressure? A Pneumatic*tires will not stand the pressure. Solid rubber tires are used. 10. What would be the approximate cost of such a motor, also of frame and such wheels as described? A. The cost of such carriages as made is about \$1,200. The motive power would cost about \$400. Dust collector cleaner, Stephens & Parsneau... 546,944 Rake

11 Would the cylinders become heated to such an extenwhen vehicle was in motion as to require cooling, and what is the general method of reducing this increased temperature? A. The cylinder requires a water jacket and a self-circulating water-cooling tank arranged on the carriage. See illustrated description of automobile carriages in Scientific American Supplement, No. 979, and Scientific American, July 20, 1895.

(6628) E. W. C. asks how to etch on steel for tool marking. A. For etching brands and marks on polished steel surfaces, such as saws, knife blades, and tools, where there are many pieces to be done alike, procure a rubber stamp with the required design made so that the letters and figure that are to be bitten by the acid shall be depressed in the stamp. Have a plain border around the design, large enough to allow a little border of common putty to be laid around the edge of the stamped design to receive the acid. For ink, use resin, lard oil, turpentine and lampblack. To 1/2 pound of resin put 1 teaspoonful lard oil; melt, and stir in a tablespoonful of lampblack; thoroughly mix, and add enough turpentine to make it of the consistency of printer's ink when cold. Use this on the stamp in the same manner as when stamping with ink. When the plate is stamped, place a little border of common putty around and on the edge of the stampedground. Then pour within the border enough acid mixture to cover the figure, and let it stand a few moments, according to the depth required, then pour the acid off. Rinse the surface with clean water; take off the putty border, and clean off the ink with turpentine. Use care not to spill the acid over the polished part of the article. For the acid, 1 part nitric acid, 1 part hydrochloric acid, to 10 parts water by measure. If the effervescence seems too active, add more water.

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de Photochromoscope and photochromosco era, F. E. Ives. ranger E. Ives.	546,877 546,906 7. Keith. 546,766 546,824 bined, W. 546,646 bined, W. 546,646
Placket closer, E. Gumbinner Planter and fertilizer distributer, comb H. Baker	bined, W. ailments, H.D. Bran
4 Plow corn planting attachment, C. D. B. 7 Plow fender, J. T. Nuckolls	546,646 aird 546,753 Scheinman Paste for removing spot
I Flow, supsoil P. Heintz	
Plow sulky attachment. Duttera & Flick Pneumatic dispatch system O Konicel	inger546,884 Raspberries, J. T. Thom Refrigerants, chemical, 0W546,859 Remedies for blood live
2 Plow sulky attachment. Duttera & Flick Pneumatic dispatch system. O. Konigsl Porous plates or electrodes, making, J Robertson	inner. 546,884 ow546,889 ohnson & diseases, W.S. tkice. Remedies for blood, live diseases, W.S. tkice. Remedies for internal
Porous plates or electrodes, making, J Robertson	onnson & diseases, W. S. Rice. Remedies for internal Revnoldsf
Porous plates or electrodes, making, J Robertson Port-bole stopper, J. Casey Power and heat, system and apparatus rating, accumulating, and distribu Warren	onnson & 546,739
Porous plates or electrodes, making, J Robertson Port-bole stopper, J. Casey Power and heat, system and apparatus rating, accumulating, and distribu Warren	onnson & 546,739
Porous plates or electrodes, making, J Robertson Port-bole stopper, J. Casey Power and heat, system and apparatus rating, accumulating, and distribu Warren	onnson & 546,739
Porous plates or electrodes, making, J Robertson. Port-bole stopper, J. Casey. Power and heat, system and apparatus rating, accumulating, and distribut warren Power transmitting mechanism, C. Berr Press. See Printing press. F. C. Stockholm. Propeller, P. F. Schmidt Pump. lift and force, E. Noppel. Rail chair and tie, combined, J. Albrech, Railway, cable, C. I. Earll. Railway, cattle, ound F. G. Emmert.	onnson & 546,739
Porous plates or electrodes, making, J Robertson. Port-bole stopper, J. Casey. Power and heat, system and apparatus rating, accumulating, and distribut warren Power transmitting mechanism, C. Berr Press. See Printing press. F. C. Stockholm. Propeller, P. F. Schmidt Pump. lift and force, E. Noppel. Rail chair and tie, combined, J. Albrech, Railway, cable, C. I. Earll. Railway, cattle, ound F. G. Emmert.	onnson & 546,739
Porous plates or electrodes, making, J Port-bole stopper, J. Casey. Power and heat, system and apparatus rating, accumulating, and distribut warren Power transmitting mechanism, C. Berr Press. See Printing press. Printing press. F. C. Stockholm. Propeller, P. F. Schmidt Pump. lift and force, E. Noppel. Rail way, cable, C. I. Earll. Railway cattle, combined, J. Albrech Railway cattle, curred, E. G. Emmert. Railway cattle, curred, E. G. Emmert. Railway cattle, J. W. Murray. Railway rails, clamp for welding, W. M. Railway rails, clamp for welding, W. M. Railway rails, comparatives, device for a	onnson & 546,739
Porous plates or electrodes, making, J Port-bole stopper, J. Casey. Power and heat, system and apparatus rating, accumulating, and distribut Warren Warren Power transmitting mechanism, C. Berr Press. See Printing press. Printing press. F. C. Stockholm Propeller, P. F. Schmidt Pump, lift and force, E. Noppel Railway, cable, C. I. Earll Railway cattle guard, E. G. Emmert. Railway rails, clamp for welding, W. M.	onnson & 546,739

	Range boiler, J. Hussey	546,737 546,672
	Registering mechanism, F. H. Richards. Registering of disbursements and receipts, apparatus for automatic, J. Frydmane. Rotary disk motor, L. Vojacek Rotary engine, Kenney & Bullock. Rotary screen. J. J. Newman. Rowing device, bow, A. Smith. Sad iron, self-heating, J. M. Doehrer. Sadelle, harness, L. J. & H. A. Varga. Sandwiches, machine for making, S. A. Gage. Sash fastener, A. E. Bray.	546,748
	Rotary disk motor, L. Vojacek	546,688 546,974
	Rotary screen. J. J. Newman Rowing device, bow, A. Smith	546,899 546,942
	Sad iron, self-heating, J. M. Doehrer	546.656 546.687
	Sandwiches, machine for making, S. A. Gage Sash fastener, A. E. Bray	546,649 546,784
	Sash weight, W. E. Merrell	546,862 546,686
1	Sawmill set works, C. F. Coffin	546,654 546,564
	Sawing machine, J. Barnes. Scale, platform, F. F. Meyer.	546,673 546,673
	Sandwiches, machine for making, S. A. Gage. Sash fastener, A. E. Bray. Sash fastener, W. J. Neidl. Sash weight, W. E. Merrell. Saw, hand, D. R. Thomas. Sawmill set works, C. F. Coffin. Saw set and jointer, W. I. & R. C. Simmons. Sawing machine, J. Barnes. Scale, platform, F. F. Meyer. Scoop board, D. S. McGurthy. Scraping, chopping, and cultivating machine, combined, J. A. Alexander. Screen. See Rotary screen. Screening apparatus, J. F. H. King.	546.801
	Screen. See Rotary screen. Screening apparatus, J. F. H. King	546,891
	Screen. See Rotary screen. Screening apparatus, J. F. H. King Sewing machine, Legg & Treacy. Sewing machine for lasting boots or shoes, W. C. Collyer. Sewing machine ruffler, A. Laubscher. Shade bolder, curtain. Van Gilder & Wilson. Shutter skat operator, T. M. Fuller Sifting apparatus, A. Bebringer. Skate sharpening device, F. W. Lowe. Slate and scbolar's companion, combined, B. B. Hartleb.	546,768
	Sewing machine ruffler, A. Laubscher	546,670 546,867
	Shutter slat operator, T. M. Fuller	546,845 546,911
3	Slate and scholar's companion, combined, B. B. Hartleb	546.848
	Soap receptacle, pulverized, C. S. Stevenson Sole, H. Mayer	546,684 546,932
	Solerounding and channeling machine, French & Meyer.	546,852
3	Hartleb. Soap receptacle, pulverized, C. S. Stevenson. Sole, H. M. dyer. Sole rounding and channeling machine, French & Meyer. Spinning, winding, and twisting machine spindle, M. Chapon. Spring. See Car spring.	546,915
)	Spring. See Car spring. Stamp, time, J. J. Busenbenz Stamps, band device for affixing postage, Martin	546,651
,	Stand. See Flower stand. Photograph stand.	546 809
,	Steam engine, J. C. Peache	546,900 546,786
	Steam trap, thermostatic, E. E. Gold Stool, camp, H. Leovy	546,846 546,895
	Stamps, hand device for affixing postage, Martin & McFeat. Stand. See Flower stand. Photograph stand. Steam boiler and coupling, E. S. Clark. Steam engine, J. C. Peache. Steam generator, J. J. Rohan. Steam frap, thermostatic, E. E. Gold. Stool, camp, H. Leovy. Stooper. See Bottle stopper. Port bole stopper. Stove, beating, J. A. Kendall. Switch. See Electric switch. Electric time switch.	546,926
2	Tank. See Fish tank.	
,	Telegraph and telephone system, combined district, Salisbury & Dean. Telegraphic vibrator, P. La Cour Telephone, G. A. Tower et al Telephone self-acting commutator, Berditschewsky dit Apostoloff & Freudenberg. Telephone system, W. W. Dean. Telephonic attachment L. J. Gerson. Telescope, binocular, E. Abbe. Telescopic joint, R. A. Kane. Tent support, C. W. Williams. Theatrical device for producing illusory effects. A. Lake.	546,904 546,892
,	Telephone, G. A. Tower et al Telephone self-acting commutator, Berditschew-	546,965
3	Telephone system, W. W. Dean	546,725 546,731 546,972
,	Telescope, binocular, E. Abbe Telescopic joint, R. A. Kane	546,871 546,699
3	Tent support, C. W. Williams. Theatrical device for producing illusory effects.	546,978
ì	Thermocauter, J. E. Lee	546,894 546,676
ì	Timber, compound for preserving, F. A. Lobert Tire, pneumatic, C. Woolley	546,960 546,968
,	Tobacco leaf stemming machine, A. H. Cochrane Trap. See Animal trap. Steam trap.	546,843
į	Trough. See Watering trough. Truck, car, E. Cliff	546.774
	Truss, A. Weil. Typewriter laey, W. B. Lillard	546,949 546,896 546,922
Ļ	Valve, air brake, S. H. Heginbottom Valve for steam cylinders, draining, T. D.Smith	546.664 546.907
1	The atrical device for producing illusory effects. A Lake. The Product of the Alexe. The bolder collar, H. M. O'Reilly. The bolder collar, H. M. O'Reilly. Timber, compound for preserving, F. A. Lobert. Tire preematic. W. Woolley. Tire upsettet. W. Woolley. Tire upsettet. W. Woolley. Trobacco leaf stemming machine, A. H. Cochrane Trap. See Annual trap. Steam trap. Truck. See Welff. Truck. Car. E. Old. Truck. Car. E. Old. Truck. Car. E. Old. Truck. Well. Truck. Car. E. Old. Truck. Ca	546,925 546,770
7	Vegetation, apparatus for exterminating, A. Scheibie Velocipede. W. I. Decker	546,682 546,954
3	Scheibe Velocipede. W. I. Decker Vessel. arrowbead-shaped, M. Golinsky Vise, linemar's J. Ryan. Wagon and ambulance, convertible patrol, E. K.	546,921 546,903
5		
3	Warp beams, a gjustable nead for, T. Blackburn Water closets, means for flushing, W. H. Robin-	
53	Son. Water purifier, H. E. Gould. Water purifying apparatus, T. Craney. Water tube boiler, H. See. Water wheel, Haskins & Evans. Watering trough, automatic stock, W. Vosburgh. Weltsjandjuppers, machine for trimmingledgesjof.	546,973 546,844
~	Water tube boiler, H. See. Water wheel, Haskins & Evans	546,715 546,663
7 B	Watering trough, automatic stock, W. Vosburgh. Weltslandluppers, machine for trimmingledgesjof, French & Meyer.	546,851
8	French & Meyer	546,764
9	Wheels. See water woel. Wheels, wood rim for vehicle, C. A. Greenleaf Windowleaning attachment. B. Fritsch Windows, auti-rattler for, E. J. Donovan Wire stratcher and carriage, combined, W. P.	546,812 546,857
0	Wire stretcher and carriage, combined, W. P. Dunlap. Wire tying machine, F. G. Chambers.	546,696
18	Wir etying machine, F. G. Chambers	546,727
9		
5	DESIGNS. Bath tub. J. H. Gavin	. 24.709
		. 49.1101

DESIGNS.		
Bath tub, J. H. Gavin Bedstead, O. E. A. Wiessner	24.711	
Bottle, J. Proeger Bowl for tea sets, C. C. Wientge Broom ferrule, A. Walrath	24.69 24.69	
Card mount. F. E. Hastings	24 .69	
Carpet, A. Bunel. 24.719, Carpet, N. S. Stewart. 24.716 to Coin receptacle, G. & W. Benze. Display stand, J. D. Goddard.	24.718 24.694	
Game board, T. H. B. Pierce	24,70] 24,698	
Handle tube, G. H. Dippo Heater, Cullen & Grimes.	24.712	
Hinge, F. E. Ranney Printed rabric, C. M. Porter Ring, C. Knapp	24,690	
Sash lock, A. A. Shields Sewing machine frame, J. F. Hardy Stove. H. G. Hagey	24,710	
Toothpick, E. McChesney	24,691 24 692	
Towel rack case, G. M. & W. A. Proctor Trimming, F. Hassenpflug Trunk corner iron, J. M. Schwerin	24,714	
Type, font of printing, Rosenow & Schmohl Type, font of printing. J. West	24,699 24,700	
Watch dial, J. O. Jacot	24,689	

TRADE MARKS.

Ale, Anheuser-Busch Brewing Association Bibles, National Publishing Company Canned goods, Sprague. Warner & Company Cigars, tobacco, and certain named groceries,	27,083
Alkire Grocer Company	27,087 27,100
Furnace Company	27,103
Marshall-Wells Hardware Company Knives, razors, scissors, and all kinds of cutlery	27, 102
and edge tools, Needbam. Veall & Tyzack Matches, Continental Match Company	27,101
Medicines, certain named, Mothers Salve Com-	
Mouth wasbes, and dentifrice, Oakley Soap and	
Ointments, pills, plasters, and specifics for all	
ailments, H. D. Brandreth	27,096
Scheinman Paste for removing spots and stains, A. Falk	27,089
Raspberries, J. T. Thompson	27,090
Remedies for blood, liver, stomach, skin, and lung diseases, W. S. Rice	27,091
Remedies for internal and external use, E.R. Reynolds	27,094
Remedy for a coholism and nervous diseases, R. L. Van Devanter	27.093
Remedy for corns, J. D. Goddard	27,097 27,085

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