

hanging bacon is provided by this invention, one which will hold the meat without mutilation and permit it to be sliced uniformly.

SHIRT.—Bennett Berenstein, New York City. A sleeve piece, according to this invention, extends beyond the armholes and forms the sleeves, extending also over the shoulder and down the back and front, being stitched adjacent to the armholes and at its lower front and rear edges, the central portion forming a bosom and reinforce for the back and shoulders of the shirt.

WHISTLE DRUM.—Orville R. Noble, Granville, Mass. On the inside of the shell of a drum, according to this invention, a small casing is secured by an eyelet, thus forming an air passage to the inside of the casing, on an annular shoulder in which is secured a whistle. The whistle is so supported as not to be damaged or injured by a child, and the beating of the drum causes a whistling sound to be produced.

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JULY, 1897.—(No. 141.)

TABLE OF CONTENTS.

- No. 1. Perspective elevation, in colors, and floor plans of a Colonial residence at Overbrook, Pa. A unique design. Mr. Thomas P. Lonsdale, architect, Philadelphia, Pa.
No. 2. Colonial house at Richmond Hill, N. Y., recently erected at a cost of \$4,200. Perspective view and floor plans. An attractive and pleasing design. Architects, Messrs. Hangaard Brothers, Richmond Hill, N. Y.
No. 3. A residence, in the Colonial style, recently erected at Larchmont, N. Y., for Mr. William Murray, at a cost of \$7,700 complete. Two perspective elevations and floor plans. A pleasing design, with excellent interior arrangement. Mr. Frank A. Moore, architect, New York City.
No. 4. A cottage at Prohibition Park, Staten Island, recently erected for Mr. August Mayer at a cost of \$2,250 complete. A very attractive design for a modern cottage of small dimensions. Perspective elevation and floor plans. Mr. John Winans, architect, Prohibition Park, Staten Island.
No. 5. "Wyandauk," the country residence of Lieut. Morton at Southampton, Long Island. A most excellent design in the Colonial style. Two perspective elevations and floor plans. Mr. James B. Lord, architect, New York City.
No. 6. A modern dwelling at Binghamton, N. Y., recently erected for Mr. William Mannis at a cost of \$3,000 complete. A good example of a suburban house. Two perspective elevations and floor plans. Messrs. T. Q. Lacey & Son, Binghamton, N. Y., architects.
No. 7. A Colonial residence at Ardmore, Pa., recently erected for Dr. Louis O. Lanson. Perspective elevation and floor plans. Messrs. Boyd & Boyd, architects, Philadelphia, Pa.
No. 8. A Colonial residence at Bensonhurst, Long Island, recently erected for Mr. Thomas A. Ritson. Two perspective elevations and floor plans. A handsome design. Architects, Messrs. Parfitt Brothers, Brooklyn, N. Y.
No. 9. A residence at West Chester, Pa., recently erected for Dr. S. Hagerty. Perspective elevation and floor plans. A design with many excellent features. Mr. Edward S. Paxson, architect, Philadelphia.
No. 10. A residence at Attleboro, Mass., erected for E. P. Claib, Esq., at a cost of \$5,500 complete. An artistic and pleasing design. Messrs. George F. Barber & Company, architects, Knoxville, Tenn.
No. 11. Perspective and interior view of the Walhalla of Ratisbon on the Danube. A costly reproduction of the Parthenon at Athens. This temple was erected at a cost of about \$6,000,000, and is devoted entirely to the display of busts of distinguished Germans.
No. 12. Design for a "cozy corner."
No. 13. View of the library of Mr. Henry L. Hotchkiss, New Haven, Conn.
No. 14. Miscellaneous Contents: Fatalities to workmen.—Scaffolding.—Lime water in freezing weather.—How to make a cheap greenhouse.—Making floors warm.—Inexpensive country homes.—Improved sash lock, illustrated.—An improved door hanger, illustrated.—A novel wood working machine, illustrated.—Gray bricks.—Dixon's silica graphite paint.—A convenient gage for carpenters and builders, illustrated.

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(7172) W. J. C. asks: Will you kindly inform writer how to plate a round globe outside the same as a looking glass? Have failed to find any receipt. A. You will have to coat your globe with silver on the inside. If you coat it on the outside, it will have a matte surface. The following are directions for silvering glass globes: Nitrate of silver..... 1 oz. Distilled water..... 3 " Alcohol..... 3 " Ammonia sufficient, or about..... 1 " Grape sugar..... 2 "

Dissolve the nitrate of silver in the water, add ammonia in a quantity just sufficient to redissolve the precipitate formed at first, add the alcohol, allow it to rest four or five hours and filter. The grape sugar is dissolved separately in 1 ounce of water, and added to the silver solution at the moment of using. The glass globes being perfectly cleaned, the solution is poured into them, and the globes are turned on all sides in front of a moderate fire, so that the liquid touches every part alike. The coating is done in a few minutes, when the excess of liquid is to be removed and the globe washed with distilled water first, and lastly with alcohol. The success of the operation depends in a great degree on the cleanliness of the surface of the glass to be silvered; the slightest speck of dust or grease spot is sure to show. A good way to clean the globes would be to wash them with a warm solution of soda, then with dilute nitric acid, and lastly with alcohol, care being taken not to touch with the fingers any part of the globes which is intended to be silvered.

(7173) A. H. G. says: Will you kindly give me the recipe for making the composition that takes fire by merely putting a drop of water on it? What I have reference to is an article sold on the streets, that looks like strips of cardboard, and all you have to do is to tear a piece off and wet it to obtain a light. Can it be made in a form that can be painted on, or cardboard or paper dipped into it? A. The substance you refer to is undoubtedly metallic sodium which is cut in thin strips. It flames violently on coming in contact with water. We do not consider its use safe. It could probably be used only in strips or chips.

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THE LOCOMOTIVE: ITS FAILURES AND REMEDIES. By Thomas Pearce. Fourth edition. Revised and enlarged. Wolverhampton: Thomas Pearce, 25 Ewins Street, Stafford Road. 1897. Pp. 96. Price \$1.

To any locomotive engineer who has a true scientific interest in his business this work, largely in the form of a catechism, which details the English practice, would be, we should imagine, of very great interest. We cannot but believe that merely as an illustration of the methods

of the English, the work would have a wide popularity in this country. The American engine runner is of so advanced views that he enjoys the study of his science, and we feel that in commending this book to him we compliment his range of thought. He should not restrict himself to the American engine as an object of study, but should know what is doing abroad.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

JUNE 29, 1897.

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

- Acid, apparatus for making sulfurous, E. Porak..... 585,401
Air purifying apparatus, A. H. Greive..... 585,568
Alarm. See Bicycle alarm. Time alarm..... 585,489
Animal trap, H. Utter..... 585,588
Artist's folding frame, F. Schweiger..... 585,588
Atomizer air forcing device, F. J. Mitchell..... 585,220
Auditory instrument attachment, J. H. Kellogg..... 585,525
Auger, earth, J. P. Swoford..... 585,488
Bales, method of and jcket for covering cylindrical cotton, M. Swenson..... 585,242
Barber's chair, E. Berninghaus..... 585,502
Bath. See Spray bath.
Batteries, apparatus for applying heat to thermo, H. C. Reagan, Jr..... 585,229
Battery. See Secondary battery.
Bearing, ball, J. E. Higdon..... 585,574
Bearing, end or thrust, W. L. Eveland..... 585,516
Bearing, roller, H. H. Ellis..... 585,561
Bearing, vehicle wheel, C. E. Roberts..... 585,363
Bed bottom frame connection, B. F. Stauber..... 585,636
Bed pad, T. B. T. B. T..... 585,349
Bed, sofa, C. F. Streit..... 585,366
Bedstead, L. Palmer..... 585,399
Bell, bicycle, L. A. Sanford..... 585,462
Bench. See Laundry bench.
Bicycle, etc., L. Beyer, Jr..... 585,177
Bicycle, etc., C. J. Temple..... 585,351
Bicycle alarm, F. Madden..... 585,529
Bicycle attachment, D. R. Saunders..... 585,288
Bicycle bearing dust guard and cleaner, H. H. Fulver..... 585,532
Bicycle brake, Humphrey & Murdock..... 585,328
Bicycle driving and steering mechanism, H. B. Tricker..... 585,370
Bicycle driving connection or belt, L. H. Wattles..... 585,416
Bicycle frame branch connection, J. H. Bennett..... 585,176
Bicycle handle bar, adjustable, E. M. Winfrey..... 585,496
Bicycle lock, M. Gessler..... 585,397
Bicycle or similar vehicle, F. P. Bemis..... 585,429
Bicycle rest, Nielson & Bequelin..... 585,283
Bicycle saddle, J. Hartman..... 585,571
Bicycle stool and pouch, combined, G. A. Shaw..... 585,495
Bicycle support, R. G. Bailey..... 585,438
Bicycle support, L. Bowles..... 585,616
Bicycle support, M. J. Gutierrez..... 585,338
Bicycle support for beginners, A. H. Falten..... 585,500
Bicycle wheel, D. R. C. Devine..... 585,325
Bicycle wheel, J. D. Prescott..... 585,286
Bicycles, etc., lantern or other carrier for, F. K. Heese..... 585,209
Billiard appliance for placing or removing pins used on billiard tables, G. Schulz..... 585,537
Binder, clip, A. M. Bogle..... 585,423
Bird trap, live, R. S. Elliott..... 585,293
Bit brace, S. McClellan..... 585,531
Blast furnace, R. H. Terhune..... 585,542
Blind window, E. Scottthrop..... 585,273
Block. See Snap block.
Bobbin, separable, J. W. Foeter..... 585,199
Boiler. See Steam boiler. Water tube boiler. Water tube safety boiler.
Bolt, A. W. Lyda..... 585,274
Book, binder, R. H. Rabel..... 585,493
Book, file report, H. D. Sheppard..... 585,408
Book holder, J. R. Gilman..... 585,566
Book, manifolding memorandum, T. McDowell..... 585,394
Book, sales, W. W. Howard..... 585,440
Book for shoe protectors, A. H. Campbell..... 585,554
Boring device, W. H. Blood..... 585,332
Bottle, B. Thibodeau..... 585,542
Bottle filling apparatus, J. H. Fahrney..... 585,264
Bottle, jug, or jar, O. J. Van Vechten..... 585,543
Bottle, mullage, A. H. Norlin..... 585,447
Bottle, non-refillable, D. W. Patrick..... 585,187
Bottle, non-refillable, W. H. Williams..... 585,353
Bottle, non-refilling, J. H. Doerr..... 585,464
Bottle, non-refilling, A. E. Schlieder..... 585,450
Box. See Letter box. Match box. Musical box. Paper box. Shoe box.
Bracket. See Bit brace.
Bracket for regulating or adjusting device, G. W. Weiss..... 585,456
Bracket. See Lamp bracket. L ntern bracket. Sheet metal bracket. Shelf bracket.
Brake. See Bicycle brake. Car brake. Sled brake. Vehicle brake.
Bracing apparatus, J. C. Dupee..... 585,641
Bricks, machine for cleaning old, S. A. Prescott..... 585,362
Broiler, A. J. Devoll..... 585,432
Broiler, electric, G. B. Fraley..... 585,306
Broiler, gas, F. A. Langwith..... 585,631
Brush, tooth, D. Gould..... 585,358
Burglar alarm system, W. T. Arnold..... 585,171
Burner. See Refuse burner.
Butter mould, D. E. Ballam..... 585,419
Button, C. H. Long..... 585,328
Cabinet, business college, R. J. Wallace..... 585,336
Calculating instrument, C. F. Fellows..... 585,336
Callipers, G. R. Clarke..... 585,184
Can. See Oil can.
Can filling machine, R. P. Scott..... 585,233
Cans, etc., device for securing, W. MacNeece..... 585,583
Canceling machine, stamp, S. Crane..... 585,621
Cane mat, C. A. Calvert..... 585,335
Car brake, McGuire & Hubbard..... 585,222
Car coupling, D. D. Martin..... 585,586
Car coupling, T. H. Walsh..... 585,323
Car door catch, Edgar & Sebring..... 585,189
Car draught rigger, W. Case..... 585,629
Car fender, W. H. Knight..... 585,340
Car sign holder, G. H. Huber..... 585,475
Car, underframe, F. H. Rapley..... 585,405
Car wheel, J. T. Jones..... 585,524
Car wheel bearing, J. T. Jones..... 585,523
Card punching machine, J. Shaw..... 585,354
Carriage loading implement, C. F. Fellows..... 585,382
Cash indicator, F. L. Fuller..... 585,467
Cash register, F. L. Fuller..... 585,565
Cash register, indicator and recorder, combined, Baumann & Wurmb..... 585,248
Chair. See Barber's chair. Folding chair. Rocking chair.
Chair, H. W. Bolens..... 585,424
Chair, J. Gilson..... 585,435
Checkrein stop, C. W. Pomroy..... 585,343
Cigar cutter and lighter, E. A. Johnston..... 585,314
Cigar cutting and lighting mechanism, E. A. Johnston..... 585,315
Cigar shaper, C. E. Doyle..... 585,348
Cigars or cigarettes, quill for mouthpieces of, R. Zeise..... 585,613
Cigarette machine, J. A. Bonack..... 585,253
Clamp. See Saddle clamp.
Cleaning device, H. C. Stewart..... 585,346
Clock, electric, Baumann & Wurmb..... 585,249
Clock, electric tower, Wurmb & Baumann..... 585,301
Closet. See Sanitary closet.
Cloth cutter, A. C. Söhlender..... 585,291
Cloth cutting machine, P. C. Morse..... 585,279
Clothes drier, C. E. Hunter..... 585,228
Clutch, friction, F. E. Hunter..... 585,271
Cock float, ball, F. C. Rockwell..... 585,449
Coffee, process of and machine for husking, T. F. Doyer..... 585,515
Coin assorting and ejecting apparatus, combined, W. D. Scott..... 585,633
Combination lock, N. Shannon..... 585,538
Condensing system, W. P. Skiffington..... 585,365

- Conductor or ground wire attachment, earth, H. M. Crane..... 585,185
Confection, I. Allegretti..... 585,372
Copy holder, automatic, F. J. Benscoter..... 585,501
Copying book, press, Sullivan & Lounsbury..... 585,397
Cotton and cleaner, A. B. Carter..... 585,430
Cotton press, S. Z. Hall..... 585,300
Coupling. See Car coupling. Thill coupling.
Cranberry picker, J. S. Washburn..... 585,455
Crane, overhead traveling, W. H. Morgan..... 585,277
Crane, carry ing, C. E. Hilliard..... 585,575
Crates, folding egg, C. Rath..... 585,534
Crushing machine, M. G. Bunnell..... 585,182
Crushing machine, M. J. Eichhorn..... 585,190
Crushing machine, Eichhorn & Bunnell..... 585,191
Culinary stock and making same, J. McFadyen..... 585,395
Cultivator, G. G. Gross..... 585,529
Cultivator riding attachment, E. G. Willeford..... 585,547
Cupola or furnace breast, G. W. Moore..... 585,275
Curtain stretcher, folding, S. E. Reeder..... 585,533
Cutter. See Cigar cutter. Cloth cutter. Rotary cutter. Stalk cutter.
Cut terrace, S. J. Shimer (reissue)..... 11,616
Cycle saddle support, C. B. Jones et al..... 585,448
Cycle saddle support, C. B. Jones et al..... 585,213
Cyclometer, W. W. Hastings..... 585,519
Dental engine mallet, C. E. Williams..... 585,494
Detachable handle for cooking vessels, T. E. Paden..... 585,284
Detector. See Second detector.
Direct acting engine, W. D. Hooker..... 585,630
Dish tray, O. Sutherland..... 585,410
Disinfecting apparatus, A. G. Hunter..... 585,627
Disk mill, H. G. Rose..... 585,536
Display rack, G. M. Jordan..... 585,300
Display stand, Leach & Crowl..... 585,415
Displaying key for oxyhydrogen lights, E. Ungler..... 585,238
Door hanger, V. M. Moore..... 585,276
Dough raising cabinet and drier, D. M. Merryman..... 585,219
Draught door adjuster, W. Wewers..... 585,608
Drier. See Clothes drier.
Drying apparatus cylinder, T. S. Crane..... 585,378
Drill press, J. W. Hawkins..... 585,384
Dynamo or motor, electric, C. E. Emery..... 585,307
Electric accumulator system, H. B. Cox..... 585,620
Electric contact device, S. H. Stahl..... 585,293
Electric heater, G. B. Fraley..... 585,309
Electric heater, G. B. Fraley..... 585,311
Electric heater, alternating current, G. B. Fraley..... 585,310
Electric machine, dynamo, G. E. Dorman..... 585,379
Electric meter, F. P. Cox..... 585,257
Electric metering apparatus, F. P. Cox..... 585,258
Electric motor, H. H. Hildberg..... 585,527
Electric motor circuit controller, H. H. Cutler..... 585,511
Electric wire circuit breaker, A. J. Clark..... 585,507
Electrolytical diaphragm, C. Kellner..... 585,357
Elevator guide, W. A. McCool..... 585,222
Engine. See Direct acting engine. Explosive engine. Fluid pressure engine. Gas engine. Locomotive engine. Rotary engine.
Engraving machine, Eaton & Goodnow..... 585,261
Envelope, J. M. Plimpton..... 585,478
Explosive engine, W. E. Gibbon..... 585,494
Eyeglasses, J. Cottet, fils..... 585,619
Fan and electric motor, combined electric, E. H. Bennett, Jr..... 585,250
Fans, screen attachment for suction or exhaust, M. R. Davis..... 585,188
Farm gate, W. E. Norton..... 585,224
Fats, refining and bleaching animal, E. Meissal (reissue)..... 11,615
Faucet, F. Guttenberg..... 585,327
Fence tightener, wire, A. Carpenter..... 585,618
Fence machine, hand, W. W. Barker..... 585,420
Fence tensioning wire, Stowell & Terry..... 585,441
Fence wire support, H. N. Sheehy..... 585,345
Fences, tool for applying brace wires in wire, E. Redmond..... 585,535
Fifth wheel, vehicle, W. F. Kramer..... 585,581
File, bill, W. F. Ordway..... 585,397
Filter and purifier, combined, T. D. McClary..... 585,281
Filter, water, J. H. H. H. H..... 585,497
Fishing line snood and cork holder, A. A. Freeman..... 585,564
Fluid pressure engine, W. H. Knight..... 585,319
Flux distributing machine, E. Wildt..... 585,495
Fly paper protector, or holder, W. Bissell..... 585,400
Folding chair and cane, J. H. Hortman..... 585,307
Fork. See Pitchfork.
Frame. See Artist's folding frame. Quilting frame.
Freight transferring apparatus, McCabe & Anderson..... 585,221
Furnace. See Blast furnace. Ore roasting furnace.
Furnace, B. C. Heavey..... 585,572
Furnace charging apparatus, blast, Rothhoff & Hamfeldt..... 585,586
Furnace charging apparatus, blast, Rothhoff & Hamfeldt..... 585,644
Furnace for heating, iron, billets, blooms, etc., F. H. Daniels..... 585,622
Furnace grate, J. A. Busam..... 585,428
Furnace lock bearer, P. Maddocks..... 585,361
Game apparatus, F. M. Archer..... 585,170
Game apparatus, F. R. Harrison..... 585,312
Game counter, E. Zerra..... 585,402
Gas engine, L. S. Brown..... 585,504
Gas engine, H. B. Steele..... 585,601
Gas generator, acetylene, J. F. Dougherty..... 585,625
Gate. See Farm gate. Tilting gate.
Gate, B. P. Stedman..... 585,240
Gearing for coupling shafts, friction, F. Singre..... 585,539
Generator. See Lamp gas generator. Steam generator.
Glass vessels, machine for making, R. & R. Good..... 585,403
Globe or shade holding device, T. Walsh..... 585,406
Glucose or sugar from starch, manufacture of, C. Pope..... 585,285
Gluing press, A. Dolge..... 585,558
Gold from ore, chlorination process of obtaining, J. J. Storey..... 585,295
Ground detector, E. W. Rice, Jr..... 585,287
Hackling machine, A. Marshall..... 585,217
Handle. See Detachable handle.
Harness, safety trip for hanging, T. H. Waterhouse..... 585,415
Harvester, cotton, J. T. Bach..... 585,588
Harvester, cotton, McCarty & Ford..... 585,588
Hat pin guide, F. Eckel..... 585,381
Hat, ventilated, D. Cross..... 585,186
Heater. See Electric heater. Water heater.
Hitching device, J. Muspratt..... 585,587
Hole, B. L. Poquet..... 585,413
Holding apparatus, J. J. Shum..... 585,257
Horsecomb foundation fastener and section press, combined, G. R. McCartney..... 585,477
Horse blanket, J. H. Dalley..... 585,306
Horse cleaner, D. S. Kennedy..... 585,326
Horseshoe calk, W. H. Davis..... 585,187
Horseshoe, elastic tread, W. R. Howe..... 585,308
Horseshoe, padded, C. E. Sheldon..... 585,290
Hose bridge, J. H. Spangler..... 585,540
Hose nozzle, J. Foley et al..... 585,196
Hub securing device, A. C. Morris..... 585,278
Hygiene apparatus, N. A. Renstrom..... 585,444
Index, W. W. Le Seur..... 585,389
Indicator. See Cash indicator.
Insulating joint, L. F. Van de Wiele..... 585,321
Iron, apparatus for manufacturing sheet, S. Burton..... 585,394
Iron ore or iron compounds, manufacturing briquets of, G. W. Petersson..... 585,591
Jar filling device, fruit, Ashbaugh & Webster..... 585,172
Joint. See Insulating joint. Universal joint.
Journal bearing, Farnsworth & Roberts..... 585,193
Journal bearing, anti-friction, D. E. Kempster..... 585,590
Knitting machine, J. F. Nelson..... 585,589
Knitting machine, circular, N. J. Winlund..... 585,606
Labeling machine, Neth & Aufuldsh..... 585,282
Lacing steel loop, M. K. Bortree..... 585,628
Ladle, dipping, W. S. Reese..... 585,612
Lading apparatus, Reese & Armstrong..... 585,622
Lamp bracket, incandescent, H. Noeck..... 585,450
Lamp, electric arc, P. H. Klein, Jr..... 585,316
Lamp, electric arc, Klein & Lavens..... 585,317
Lamp, electric arc, E. Lavens..... 585,318
Lamp, electric arc, C. J. Toerring, Jr..... 585,093
Lamp for bicycles or other vehicles, J. H. White..... 585,609
Lamp gas generator, J. C. Gallagher..... 585,518
Lamp support, bicycle, Hamm & Tufford..... 585,411
Land roller, C. B. Taylor..... 585,511
Lantern, A. L. Clark..... 585,555
Lantern bracket, R. Rhind..... 585,406
Latch lock, rim, Dent & Kaiser..... 585,200
Lathing, metallic, A. R. Fordyce..... 585,231
Laundry bench, portable, J. Schaffer..... 585,231
Lead traps, making, J. B. Manchester..... 585,446
Leather stretching machine, A. F. Jones..... 585,212
Lens testing instrument, A. J. Lloyd..... 585,390
Letter box, W. E. Huber..... 585,577
Life saving raft, E. Clark..... 585,308
Line holding, cupola and metallurgical furnace, E. J. Bird..... 585,304
Line holder, H. Betka..... 585,459
Lock. See Bicycle lock. Combination lock. Latch lock. Mail pouch seal lock. Permutation lock.
Lock, L. C. Babcock..... 585,614
Locking device released by recoil, safety, W. Mason..... 585,392
Locomotive, W. W. Maddox..... 585,530

(Continued on page 30.)