

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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SCIENTIFIC AMERICAN BUILDING EDITION

JULY, 1897.—(No. 141.)

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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. Haugaard 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. Lasson. Perspective elevation and floor plans. Messrs. Boyd & Boyd, architects, Philadelphia, Pa.
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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.
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No. 12. Design for a "cozy corner."
No. 13. View of the library of Mr. Henry L. Hotchkiss, New Haven, Conn.
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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.]

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