

Business and Personal.

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HINTS TO CORRESPONDENTS.
Names and Address must accompany all letters, or no attention will be paid thereto. This is for our information and not for publication.
References to former articles or answers should give date of paper and page or number of question.
Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research, and, though we endeavor to reply to all either by letter or in this department, each must take his turn.
Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same.
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Scientific American Supplements referred to may be had at the office. Price 10 cents each.
Books referred to promptly supplied on receipt of price.
Minerals sent for examination should be distinctly marked or labeled.

(6563) J. C. B. says: 1. Will you be kind enough to give formula to make liquid glue similar to the Le Page glue? A. We have not the Le Page formula. A liquid glue possessing great resisting power, recommended for wood and iron, is prepared, according to Heze, as follows: Clear gelatine, 100 parts; cabinet makers' glue, 100 parts; alcohol, 25 parts; alum, 2 parts; the whole mixed with 200 parts of 20 per cent acetic acid, and heated on a water bath for six hours. An ordinary liquid glue, also well adapted for wood and iron, is made by boiling together for several hours 100 parts glue, 200 parts water, and 16 parts nitric acid. 2. Also simple and effective way to remove warts on face? A. Castor oil constantly applied from 2 to 4 or 6 weeks, each day, that is, once a day; it has not failed in my hands, says a writer in the Therapeutic Gazette, in any case of any size or long standing. The time it takes may try the patience of the user, but, if faithfully used, they will get their reward in the removal of the wart without leaving any scar.

(6564) J. S. S.: It is impossible to obtain Morse signals with a Thomson siphon recorder. Any book on telegraphy will give you a description of the Atlantic cable.

(6565) G. G. M. writes: 1. I have made my own zinc sticks, and would like to know the easiest and best way to amalgamate them? A. Dip them in dilute sulphuric acid, then sprinkle on a little mercury and rub it around, or dip the rods in a solution of nitrate of mercury. 2. Would like to know the ratio of the different ingredients for the solution of a bichromate of potash battery? A. To a saturated solution of bichromate of potash, slowly add one-fifth its bulk of sulphuric acid. 3. I have some electric light carbon sticks (without copper) 1/2 inch in diameter and 7 inches long. How many carbon sticks to zinc surface necessary in a bisulphate of mercury battery; and give the solution for this battery. How many carbon sticks in a bichromate of potash? A. Six or 8 carbon rods. Make a thick paste of bisulphate of mercury in water. 4. Give the best and easiest way of connecting the carbon sticks without soldering? A. Cast lead caps on the carbons. 5. In the answer to query No. 6203, September 1, 1894, must the solution, when placed in the jar, be a thin paste or have some water added? A. Thin paste. 6. What is the best battery for induction coils? A. Grenet. 7. Does it matter whether or not the secondary is wound in opposite direction to the primary? A. No. 8. Give ratio of quantity of primary to secondary for any number of wire, especially for Nos. 16 and 36? A. It depends on the induced current desired, 500 to 1,000 to 1. 9. What is the best material to use between primary and secondary wire in an induction coil? A. A glass tube, a rubber tube, or writing paper coated with shellac, varnish, or paraffin.

(6566) H. W. N. says: Where can I find descriptions of automobile vehicles for use on common roads? A. See the SCIENTIFIC AMERICAN for February 14, 21, 1891; May 21, 1892; February 3, March 31, April 21, June 23, 1894; January 12, February 9, March 23, April 6, May 4, June 8, 1895; and the SCIENTIFIC AMERICAN SUPPLEMENT numbers 993, 979, 912, 857, and 839.

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An experience of nearly fifty years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere. A synopsis of the patent laws of the United States and all foreign countries may be had on application, and persons contemplating the securing of patents, either at home or abroad, are invited to write to this office for prices, which are low, in accordance with the times and our extensive facilities for conducting the business. Address MUNN & CO., office SCIENTIFIC AMERICAN, 361 Broadway, New York.

INDEX OF INVENTIONS
For which Letters Patent of the United States were Granted
June 25, 1895,
AND EACH BEARING THAT DATE.

Table listing various inventions such as 'Acid and by-products, method of and apparatus for manufacturing sulphuric acid', 'Electric motor', 'Railway switch', etc., with corresponding page numbers.

Table listing various inventions such as 'Electric conductors, protector casing for under-ground', 'Electric motor', 'Railway switch', etc., with corresponding page numbers.

Table listing various inventions such as 'Railway switch, A. R. Milliken', 'Reostat for starting electric motors', 'Riveting machine, cardboard', etc., with corresponding page numbers.

DESIGNS.
Table listing various designs such as 'Badge, W. N. Brunt', 'Bicycle seat frame, G. Harden', etc., with corresponding page numbers.

TRADE MARKS.
Table listing various trade marks such as 'Beer, lager, National Union of the United Brewery Workmen', 'Roots and shoes, N. L. Millard & Company', etc., with corresponding page numbers.

A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1837, will be furnished from this office for 25 cents. In ordering please state the name and number of the patent desired, and remit to Munn & Co., 361 Broadway, New York.