

Business and Personal.

The charge for insertion under this head is One Dollar a line for each insertion; about eight words to a line.

For Sale—New and second hand iron-working machinery. Prompt delivery. W. P. Davis, Rochester, N. Y.

Split Pulleys at low prices, and of same strength and appearance as Whole Pulleys. Yocum & Son's Shafting Works. Drinker St., Philadelphia, Pa.

Notes & Queries

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 This is for our information and not for publication.

(2773) F. C. C. asks: 1. Have any people been killed while riding on electric street cars, or while getting on and off the cars, simply by a "shock" from the motor current?

(2774) F. A. B. asks: 1. Why does a telephone buzz when near an electric street car line or after the current is turned on the electric light wires at night?

(2775) D. J. P., Weymouth, asks for the best solution (not paint) to use on wood for the purpose of rendering it fireproof.

(2776) X. Y. Z. asks how to make whitening into a cake, so that by rubbing a cloth on it lightly it will take up enough to polish any substance with, and thereby prevent the waste and dust as when used in the form of powder.

(2777) H. N. M. asks: What is the difference between frictional electricity and dynamic electricity? I mean in quality, or is there any difference?

(2778) J. G. W. asks: How best to paste a large paper map on cloth, and have it smooth.

(2779) B. B. asks: How can drawings or diagrams be cheaply and easily made for lantern use without the aid of photography?

(2780) E. U. S. asks: Will you please inform me the best remedy you know of for catarrh or cold in the head.

(2781) L. A. C. asks: 1. Would the exact center of a perfectly revolving shaft remain stationary or revolve? A. All material parts of the shaft revolve.

(2782) E. M. H. asks: 1. Would two one quart cells of Bunsen battery develop enough power in the motor described in the SCIENTIFIC AMERICAN SUPPLEMENT, No. 767, to run a small fan, say 15 inches diameter, in the summer time, and if so, about how many hours would it run before becoming exhausted?

(2783) A. G. asks: I recently saw in a printing office a new process of making newspaper cuts. The material consisted of a dark steel plate coated with a white composition, through which the drawing was scratched with a sharp steel point, thus forming a matrix for the stereotyper.

(2784) A. N. asks: What is the composition of the size used by the book binder to make his gold leaf adhere to the leather before applying his heated lettering type.

(2785) W. H. asks which is the finer gold—a ring of eighteen carat or a gold coin. A 18 karat is 3/8 gold and 5/8 alloy.

(2786) W. S. C. writes: I have been making some Leyden jars according to directions given in Hopkins' "Experimental Science," and have had trouble owing to the conductivity of the glass, caused, I presume, by the metallic oxides used in their manufacture.

(2787) P. M. writes: I have a barrel of vinegar, partly made of cider and partly of whisky, which has turned into an iron-like black color.

lution of pure gelatine. Experiment with a small portion first.

(2788) J. D. B. asks: Can you give me a receipt for treating oleine so as to make it suitable for paint oil? Have tried ammonia, borax, soda, alum with muriatic acid, which clarifies it nicely, but it will not dry; to be used for barn paint.

(2789) J. D. asks: 1. What is the meaning of Fahrenheit? A. Degrees of the Fahrenheit thermometer; each one indicates 1-180 of the difference between the temperature of melting ice and that of condensing steam at atmospheric pressure.

(2790) M. S. G. asks for recipes for making: 1. A tooth wash. A. Camphor 1/2 ounce, tincture of myrrh 2 ounces, tincture of Peru balsam 2 ounces. Rectified spirit 1 pint, oil of spearmint 10 drops.

(2791) A. W. H. asks how the bronzing of plaster casts is done. I have a natural size plaster cast of Shakespeare's face and I want to bronze it.

(2792) H. R. asks for the simplest method for preparing and moulding gutta serena and hard rubber. A. Use heat and pressure.

Replies to Enquiries. The following replies relate to enquiries recently published in SCIENTIFIC AMERICAN, and to the numbers therein given:

(2655) I would say, if I were to answer Mr. E. P. H. in regard to heating burnisher, that it will burnish best at about 250° or 260°.

M. E. C. says: The crusts in the tea kettle can be softened and easily rinsed out by boiling sweet fern branches and leaves in the tea kettle for awhile.

TO INVENTORS.

An experience of forty 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.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted January 20, 1891.

AND EACH BEARING THAT DATE. (See note at end of list about copies of these patents.)

Table of inventions with columns for inventor names and patent numbers. Includes entries like Brush, rotary, R. Roy, 445,083; Car brake, J. Kinney, 444,930; Car heating apparatus, J. H. Sewall, 445,039.