

Notes & Queries.

[We present herewith a series of inquiries embracing a variety of topics of greater or less general interest. The questions are simple, it is true, but we prefer to elicit practical answers from our readers.]

- 1.—INDIA RUBBER BELTS.—Can an endless gum belt be made uniform in thickness and strength throughout? ... 2.—DIMENSIONS OF AIR PUMP.—How large an air pump do I want, and at what rate of speed should I run it, to produce a pressure of 100 pounds per inch, the air to be discharged through a three eighth inch pipe, and the discharge pipe to be open all the while? ...

Answers to Correspondents.

SPECIAL NOTE.—This column is designed for the general interest and instruction of our readers, not for gratuitous replies to questions of a purely business or personal nature. We will publish such inquiries, however, when paid for as advertisements at 10 a line, under the head of 'Business and Personal.'

ALL reference to back numbers must be by volume and page.

- TEMPERING MINERS' PICKS.—J. A. C. will find full directions on page 170 of Vol. XXV. of the SCIENTIFIC AMERICAN. STAINING GUN BARRELS.—To S. G.—We have recently given full information on this subject. ... DIFFERENTIATION OF FOCI.—How should the lenses of a portrait camera tube be set so that the chemical focus and the light focus will be coincident? ...

- CLEANING INSTRUMENTS.—To H. O. M., query 19, page 297.—If the lacquering is badly spotted, clean it off with strong alcohol, and then polish the brass or German silver with the following paste by means of flannel and a little water, and polish off with clean chamois leather or cotton cloth and a little whitening, after which you might revarnish with shellac dissolved in alcohol, colored with a little dragon's blood, which can be got from any apothecary: ... CONCRETE WALLS.—T. D. D., query 13, page 297.—Boil linseed oil over a fire for two or more hours until it forms on cooling a tough viscid mass. ...

- APPARATUS FOR ELEVATING AND IMMERSING VESSELS.—Justin Jacobs, of West Salem, Wis.—This invention relates to a new device for application to river steamers, canal boats, and other vessels, and has for its object to prevent their sinking in case of a dangerous leak, and to cause their submersion in case of fire. ... ARMORED CAN.—William F. Thompson, of Toledo, Ohio.—This improvement consists, first, in armoring sheet metal cans with wood to protect the thin metal from injury in handling and transporting, by fastening side, bottom, and top pieces, or boards to the can by means of clamp plates, soldered or otherwise fastened to the corners of the can, and the ends bent over the edges of the boards after they are applied, whereby much is saved in the cost of the wood case or protecting armor, ...

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

- APPARATUS FOR SUPPLYING LOCOMOTIVE TENDERS WITH FUEL.—Henry C. Land, of Garderville, Miss.—This consists of a platform or frame, on which the wood or coal is placed. To its lower side, at or near its central line, is pivoted the upper end of a frame, by which the platform is supported. ... PICKLE AND CRUET STAND.—Thomas Leach, Taunton, Mass.—1st. The invention consists in a new pickle stand, provided with a hollow seat for pickle vessels, attached to and placed between two uprights, and provided also with a horizontal flange on which is fastened a vertical handle that straddles said hollow seat diametrically; ...

- ILLUMINATOR.—Chas. F. Jacobsen, New York city.—The invention consists in combining glass plates, a flanged metallic case, a flanged metallic rim, two concave reflectors and a pair of burners, so as to form a new double night sign. ... PLANTER.—Weiss Beall, of Hainesville, W. Va.—The invention consists in introducing certain mechanical elements into the train of mechanism which connects the axle with the seed slide of a planter, by which the number of hills planted may be indicated on a dial with which it is combined. ...