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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 encieavor 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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price.

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(7818) E. A. writes: I have an experimental-science book on electricity bought from you and would like to know if you could give me a few explana-tions about caustic potash batteries, page 408, Fig. 404, illustrated. I would like to know if possible the propor tion for making this battery, how much zinc, oxide of copper and potash solution. Is it good for sparking purpose? A. The zinc may be of any size you find convenient. The potash solution is to be saturated, that is dissolve all the caustic potash in the water which you can, at ordinary temperature. The copper oxide may be put on the bottom of the cell to the depth of an inch or so. Proportions are not important, else they would have been given in the book. You would better buy the Edison-Lalande cell, which is an improved form of this cell. It is widely used for sparking purposes.

(7819) C. L. says: I want to get a preparation of gums or some sticky material to use in this manner in tableting sheets of paper, spread thinly on cloth and dried; when wanted, to be wet with water in sponge and applied to the end of tablet, where it will hold every sheet, yet allow them to be torn off and will remain flexible. A. The composition is said to be prepared as follows: Glue, 4 lb.; glycerine, 2 lb.; linseed oil, ½ lb.; sugar, ½ lb.; aniline dyes, q. s. to color. The glue is softened by soaking it in a little cold water then dissolved together with the sugar in the glycerine, by aid of heat over a water bath. To this the dyes are added, after which the oil is well stirred in. It is used hot. Another composition of a somewhat similar nature is prepared as follows: Glue, 1 lb.; glycerinc, 4 oz.; glucose sirup, about 2 tahlespoonfuls; tannin, one-tenth oz. Give the compositions an hour or more in which to dry or set before cutting or handling the pads.

TO INVENTORS.

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INDEX OF INVENTIONS OVERHEAD

For which Letters Patent of the United States were Issued for the Week Ending

JANUARY 23, 1900,

AND EACH BEARING THAT DATE

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