SUPPLEMENT, No. 160, do you think by insulating coils better that spark can be increased in length, if I used 2 pounds of double covered silk instead of bare wire in No. 160, would it pay to do that way? A. Silk covered wire is no better than bare wire, provided the latter does not short circuit. A very slight increase in size of coil No. 160 would enable it to give a two inch spark. 4. Can better effects be obtained from a Tesla coil for less cost than ordinary coil? A. The Tesla coil gives very fine results, but introduces more expense. 5. You say that the length of spark depends on the amount of wire in primary coil. Does not length of spark depend on voltage and the voltage on the ratio between the number of convolutions on primary and secondary coil. If too much wire is put on primary, will not the ratio of the two be too uniform thus shortening the spark? A. You misapprehend the case. The extra current in the primary makes its turns efficient in increasing the voltage in the secondary. This voltage depends on the lines of force of the primary, and these vary directly with the number of turns in it. 6. I have the use of a lathe, but it has no device to wind wire, as in SUPPLEMENT, No. 160. Do you not think it would pay to use at least single covered wire? A. It might as a matter of security.

(6936) F. E B. writes: My ice house is filled with choke damp or fixed air, which renders it dangerous and almost impossible for any one to go down into it and remain a sufficient length of time to get a supply of ice. Can you tell me how to get rid of it? A. There is one efficacious cure—ventilation. If this is objectionable or impossible, place a large shallow box containing freshly slaked and thoroughly wet lime upon the surface of the ice or packing. One or two bushels of lime should effect the cure.

(6937) R. A. says: I would be pleased to know of a good formula for making a quick drying retouching preparation for photograph negatives, and how to apply it? A. This powder is prepared by mixing together—

Dextrine..... 2 parts.
Resin (very finely powdered)..... 1 part.

It may be employed both for application to negatives and to albumenized prints. A leather stump is the best means of application.

TO INVENTORS.

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 unequaled 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.

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