



(13) J. W. writes: I have need of a composition similar to that used on the parlor match, and as nearly tasteless and odorless as possible.

- Phosphorus... 1/2 part.
Potassium chlorate... 4
Glue... 2
Whiting... 1
Finely powdered glass... 4
Water... 11

Also see formula given in answer to query No. 19 in SCIENTIFIC AMERICAN for April 14, 1882. We do not know of a compound of this kind that would be tasteless.

(14) U. H. P. asks how to make a tank for cyanide plating solution for silver, made with wood bottom and ends, and plate glass sides, what is best cement for joints?

- Resin... 6 pounds.
Dried red ocher... 1
Calced plaster of Paris... 1/2
Linseed oil... 1/2

Water glass is soluble in water, and therefore we do not think it adapted for this purpose. The best method of tinning is by dipping.

(15) F. H.—1. To prepare sheepskins for mats. Make a strong lather with hot water and let it stand till cold; wash the fresh skin in it, carefully squeezing out all the dirt from the wool.

2. Fur skins are tanned by first removing all of the useless parts and softening the skin by soaking, then remove the fatty matter from the inside and soak it in warm water for an hour.

(16) C. E. B. writes: 1. I am making a 2' x 4' horizontal engine. What size and kind of boiler should I use for it?—not too expensive?

(17) T. E. O. asks: 1. What can I use to polish brass faucets and keep them bright? A. Rotten stone and kerosene oil.

MINERALS, ETC.—Specimens have been received from the following correspondents, and examined, with the results stated:

E. L. H.—The mineral or whitish powder appears to be the mineral kaifinite, or alum, a sulphide of potassium and aluminum of but very little commercial value.

COMMUNICATIONS RECEIVED. On Sun Spots. By Cap. J. M. On the Position of Science and Scientists. By W. N. L.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

August 14, 1883.

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Table listing inventions such as Amalgamating the gold and silver in pulverized ores, Angle iron bending, Animal trap, Auger bit, Auger bits, machine for twisting, W. Tucker, Auger, post, J. E. Miles, etc.

Table listing inventions such as Elastic or cord fabric, Green Jr., & Smith, Electric battery, C. P. Orne, Electric circuit track instrument, C. A. Scott, Electric commutator or switch, E. Thomson, etc.