FERROCYANIDES OF POTASSIUM.

On the Decomposition of the Yellow and Red Ferrocyanides of Potassium, by Solar Light.—A solution of the yellow prussiate of potash, kept in the dark, does not change its color; but when exposed to the action of solar light it becomes of a deeper yellow. So to render that change very perceptible, a week, *i. e.*, nearly colorless solution must be used, in which case the liquid will assume a yellow color, after having been acted upon by a strong sunlight only for a few minutes. If the bottle containing the solutions be closed and not quite filled with the liquid, an odor of prussic acid is perceptible, and at the same time a reddish yellow sediment subsides, which seems to be the peroxide of iron.

The decomposition of the cyanide takes place much more rapidily when strips of filtering paper or linen are immersed in a solution of the salt, and exposed to the action of solar light. In a very short time that part of the strip turned towards the sun, becomes yellow, whilst the opposite side remains colorless or nearly so. If strips of paper moistened with the solution of the common prussiate of potash, are closed up in a glass bottle containing air, they also turn yellow by exposure to the sun, and a strong smell of prussic acid is perceptible in the vessels after a short time. In the shade no such action takes place.

A large piece of linen cloth drenched with a solution of the yellow salt, after having been exposed in the open air to the action of solar light for thirty-six hours, had turned deeply yellow, and yielded, when treated with distilled water, a deep yellow solution, which on being filtered and heated to boiling became turbid, and deposited flakes of peroxide of iron. The same solution exhibited a stronger alkaline reaction than the solution of the common prussiate does. From the facts stated, it appears that the yellow ferro-cyanide is decomposed by light into prussic acid, oxide of iron, and potash, and a compound formed, yielding with water a yellow solution. Is that compound carbonate of potash and peroxide of iron; and do the constituent gases of the atmosphere take part in the decomposition besides the solar light? Further experiments must answer those questions. A limpid solution of the red cyanide also becomes turbid when exposed to the action of solar light, prussic acid being evolved and peroxide of iron thrown down.

APPELLES.

Apelles, one of the most celebrated painters of antiquity, was born in the Isle of Cox, and flourished in the time of Alexander the Great. He was in high favor with that prince, who made a law that no other person should draw his picture but Apelles; he accordingly drew him holding a thunderbolt in his hand, the piece was finished with so much skill and dexterity, that it used to be said, there were two Alexanders, one invincible, the son of Philip, the other inimitable, the production of Apelles. One of his chief excellencies was, the making his pictures so exactly resemble the persons represented, that the physiognomists were able to form a judgment as readily from his portraits, as if they had seen the originals.

To Tin Iron.—Cleanse the surface of the iron well, by scouring with weak sulphuric acid, to remove oxide, then immerse the iron in a bath composed by digesting in 17½ pints of soft water, 10½ ounces of bi-tartrate of potash or soda (tartaric acid, or acidulated tartic of potash, or soda cream of tartar,) and then adding an aqueous solution of three quarters of an ounce of protochloride, or other soluble salt of tin.

Bromine.—American Bromine is fully equal, and we believe it superior to the German, in forming Quicks.