ALKALIS.

Ammoniae aqua, et

Ammoniae aqua fortior.

Take of Muriate of ammonia, thirteen ounces;
Quicklime, thirteen ounces;
Water, seven fluidounces and a-half;
Distilled water, twelve fluidounces.

Slake the Lime with the water, cover it up till it cool, triturate it well and quickly with the Muriate of ammonia previously in fine powder, and put the mixture into a glass retort, to which is attached a receiver with a safety tube. Connect with the receiver a bottle also provided with a safety-tube, and containing four ounces of the Distilled water, but capable of holding twice as much. Connect this bottle with another loosely corked, and containing the remaining eight ounces of distilled water. The communicating tubes must descend to the bottom of the bottles at the further end from the retort; and the receiver and bottles must be kept cool by snow, ice, or a running stream of very cold water. Apply to the retort a gradually-increasing heat till gas ceases to be evolved; remove the retort, cork up the aperture in the receiver where it was connected with the

retort, and apply to the receiver a gentle and gradually-increasing heat, to drive over as much of the gas in the liquid contained in it, but as little of the water, as possible. Should the liquid in the last bottle not have the density of 960, reduce it with some of the Stronger Aqua ammoniæ in the first bottle, or raise it with distilled water, so as to form Aqua ammoniæ of the prescribed density.

Ammoniae carbonas.

Take of Sal-ammoniac, one pound;
Chalk, one pound and a-half.

Reduce them separately to fine powder, mix them thoroughly, and subject the mixture in a retort with a proper receiver to a gradually-increasing heat so long as any vapours sublime.

Ammoniae carbonatis aqua.

Take of Carbonate of Ammonia, four ounces;
Distilled water, one pint.

Dissolve the salt in the water.

Ammoniae acetatis aqua.

Take of Distilled vinegar, (from French vinegar in preference) twenty-four fluidounces;
Carbonate of ammonia, one ounce.

Mix them and dissolve the salt. If the solution has any bitterness, add by degrees a

little distilled vinegar till that taste be removed. The density of the distilled vinegar should be 1005, and that of the Aqua acetatis ammoniæ 1011.

POTASSA.

Take any convenient quantity of Aqua potassæ; evaporate it in a clean and covered iron vessel, increasing gradually the heat, till an oily-looking fluid remains, a drop of which, when removed on a rod, becomes hard on cooling. Then pour out the liquid upon a bright iron plate, and as soon as it solidifies, break it quickly and put it into glass bottles secured with glass stoppers.

POTASSAE AQUA.

Take of Carbonate of potash (dry) four ounces;
Lime recently burnt, two ounces;
Water, forty-five fluidounces.

Let the Lime be slaked and converted into milk of lime with seven ounces of the water. Dissolve the Carbonate in the remaining thirty-eight fluidounces of water; boil the solution, and add to it the milk of lime in successive portions, about an eighth at a time,—boiling briskly for a few minutes after each addition. Pour the whole into a deep narrow glass-vessel for twenty-four hours; and then withdraw with a syphon the clear liquid, which should amount to at

least thirty-five fluidounces, and ought to have a density of 1072.

POTASSA CUM CALCE.

Take any convenient quantity of Aqua potassæ ; evaporate it in a clean covered iron vessel to one-third of its volume ; add slaked Lime till the fluid has the consistence of firm pulp : preserve the product in carefully covered vessels.