

add the iron wire to the dilute acid and let the action continue during the night. Most of the metal will thus be dissolved in the cold, a gentle heat may then be applied until the disappearance of the metal. The solution is then filtered; mixed with the reserved portion of hydrochloric acid, brought to the boiling temperature, and the nitric acid added, by small portions, so long as effervescence is produced, or until the liquor assumes the characteristic red color. The heat is then continued until the bulk is reduced to 8 fluid ounces, (for each 2 oz. of iron); and, when the solution is cold, the proper measure is made up with distilled water. In this way the liquor will have an excess of acid. This may be further reduced by continued evaporation, but I do not think it advisable to go beyond the point indicated, as insoluble crusts, and deposits, are liable to be formed, which are exceedingly difficult to dissolve. I do not think that any considerable amount of acid is present even when the solution is only evaporated to 10 fluid ounces, as there is only a difference of .01 sp. gr. when the liquor is reduced to 4 ounces, and again made up to the original bulk.

The specific gravity of the preparation is stated by the *British Pharmacopœia* to be 1.338. As pointed out by Squire, (*Companion to the Pharmacopœia*) this is an error. The result of my experiments does not correspond with the figure given by the latter authority, as I find the sp. gr. to be 1.443, while Squire gives it as 1.420. In the *U. S. Dispensatory* (Ed. 1867, p. 1201), it is stated that by continuing the evaporation to five fluid ounces, then adding sufficient water to make up ten fluid ounces, the sp. gr. will be 1.410. I have carried the evaporation as far as four fluid ounces; but find that when the stated bulk is made up, the density will be 1.432. These errors should be corrected, as they are calculated to mislead those who depend more on density than any stated measurement; and purchasers of a liquor are apt to question its reliability if it does not answer to all the officinal tests. I have no doubt but in this way manufacturers have been often charged with want of care when it did not rightly belong to them.

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