

equal time. At the same time, however, it should be stated their fusing point is slightly lower, and, again, their wicks are not so evenly placed, and are sometimes badly made. The low fusing point of these candles causes them to "gutter" in the slightest draught of air.

Brand of Candle.	Illuminating Power for equal time.	Illuminating Power for equal weights.	Weight in grains consumed per hour.
Brandon ...	100	100	138
Price ... ..	92	88·7	143

*Snuff.*—The time at my disposal has not been sufficient to allow me to go as far into the chemical examination of our snuffs as I should like, nor yet as far as I think there is occasion for, so I have only partially examined three samples. From the result, it appears their water and solid matters are nearly uniform in quantity, and that they have been adulterated with a little ferruginous earth. As common salt is allowed by law to be added to snuff to any extent, it was not estimated.

Number.		Water per cent.	Mixed Matter per cent.
1	Dry ... ..	26·42	26·40
2	Dry ... ..	26·04	24·66
3	Moist ... ..	31·06	21·17

No. 1 contained 3·1 per cent. of silica. No. 3, analyzed for copper and lead, gave negative results.

*Boots.*—Three pairs were examined for paper, or other material, added for fraudulent purposes. Nothing of such a nature was found. However, some time since it came under my notice that paper is added in certain very light boots and slippers, but I believe a knowledge of this fact is not held back by sellers.

*Spirits.*—Sixteen samples of spirits have been thoroughly tested as to strength and freedom from noxious adulterants. These have been all obtained from publicans in quantities of one bottle each.

In all cases where a brand was attached to samples, I found it pure and of very fair strength; while in the two or three cases where a noxious substance was present, the spirit was freshly taken from bulk (in cask).

I have prepared a table showing my results upon them (Table II.)

*Brandy.*—Six brandies, five of which are of different brands, upon examination show a very singular uniformity. The brands are Hennessy's, Martell's, Associated Company's Vineyard No. 1, and Bisquit. They contain, roughly, 50 per cent. of alcohol, which is about as high as these liquors are ever sold at.

The quantity of solid matter is also very uniform; and I could discern no notable difference in their quality.

I should state that the precise and relative merits of good liquors (wine or spirits) cannot be ascertained by any purely chemical means at present known, and therefore I have not sought to compare them as to this.

The Genevas (4) are of good quality; the only impurity I was able to detect was sulphuric acid, in the case of No. 3; but as this was in combination, I do not think it had been added to the liquor purposely.

The range of alcohol is from 41·3 to 58 per cent., while the solid matters were tasteless, except in the case of that variety known as "Old Tom;" the solid matter in this was principally sugar (2·4 per cent. upon liquor), and this substance is added in good faith to consumers.

*Whisky.*—Only two samples of whisky have been examined—one that known as Dunville's, of Belfast, the other not branded; both are of excellent quality.

*Rum.*—Five samples of rum were tested. With none were brands attached: as a rule they had just been taken fresh from cask. They are all strong rums—in one case 62 per cent. of alcohol is present. In regard to noxious matter, I found copper in two of them, but as traces only; and in another I found tobacco in very appreciable quantity. The copper might, and in all probability has, got into the rum accidentally, dissolved off from some copper vessel used in the process of manufacture. With the exception of two or three rums, it will be seen all the spirits are of very good quality.

For further particulars, see Table II.