

Fluid collected in minims.	Ammonia in grains per gallon.	Source.
150	1·9712	Erysipelas.
120	·1791	Garden.
55	6·8807	Drains.
90	2·1000	Bed-room.
420	2·9568	Stables.
150	·0985	Victoria Park.

XI. "Contributions to Terrestrial Magnetism.—No. XIII." By General Sir EDWARD SABINE, K.C.B., V.P.R.S. Received June 19, 1872.

(Abstract.)

The author presents this paper as the companion of No. XI. of his Contributions to Terrestrial Magnetism, which contained the Magnetic Survey of the Southern Hemisphere from 40° south latitude to the extreme limit towards the southern pole, as does the present memoir, No. XIII. of the same series, the three magnetic elements from 40° north latitude to the furthest attained limit towards the northern pole. In both papers the mean epoch is the same, viz. 1842·5. Where it has been possible to do so, corrections to this mean epoch have been obtained and applied to earlier and later observations.

The determinations are derived from observers of all countries, and are arranged in zones, each of 5° of latitude, passing round the globe. The Table thus formed contains between 3000 and 4000 stations at which the magnetic elements have been determined. The observers are named, and references are made to the sources from whence their observations are taken. The paper is accompanied by maps of the resulting Isogonic, Iso-clinal, and Isodynamic Lines, executed at the Hydrographic Office.

XII. "On the Law of Extraordinary Refraction in Iceland Spar." By G. G. STOKES, M.A., Sec. R.S. Received June 20, 1872.

It is now some years since I carried out, in the case of Iceland spar, the method of examination of the law of refraction which I described in my report on Double Refraction, published in the Report of the British Association for the year 1862, p. 272. A prism, approximately right-angled isosceles, was cut in such a direction as to admit of scrutiny, across the two acute angles, in directions of the wave-normal within the crystal comprising respectively inclinations of 90° and 45° to the axis. The directions of the cut faces were referred by reflection to the cleavage-planes, and thereby to the axis. The light observed was the bright D of a soda-flame.

The result obtained was, that Huygens's construction gives the true law

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