*Analysis.—*To detect strontium in a salt-solution, we first eliminate the heavy metals by the successive application of sulphuretted hydrogen (and free acid) and of sulphide of ammonium in the presence of ammonia and sal-ammoniac. From the filtrate carbonate of ammonia (in the heat) precipitates only the barium, strontium, and calcium as carbonates, which are filtered off and washed with hot water. The analysis of the precipitate is difficult ; but any strontia in it is easily detected by means of the spectroscope (see Spectroscopy).

STROPHANTHUS, a genus of plants of the natural order *Apocyneæ,* deriving its name from the long twisted thread-like segments of the corolla, which in one species attain a length of 12 or 14 inches. The genus at present comprises about 18 species, confined to tropical Africa and Asia, only one species, indigenous to the former continent, being known outside the tropics. Several of the African species furnish the natives of the countries in which they grow with the principal ingredient in their arrow poisons. The inée or onaye poison of the Gaboon, the kombé poison of equatorial North Africa, the arquah poison of the banks of the Niger, and the wanika poison of Zanzi­bar are all derived from members of this genus. The exact species used in each case cannot be said to be accurately known. There is little doubt, however, that *S. hispidus,* D.C., is the one most frequently employed.

Two of the arrow poisons have been chemically and physio­logically examined. The kombé poison was subjected to some preliminary experiments in 1862 by Prof. Sharpey, but was more fully examined a few years subsequently by Prof T. R. Fraser. From the investigations of the latter@@1 it appears that the kombé arrow poison, when given in fatal doses, paralyses the action of the heart. In minute doses, however, it possesses a tonic action on that organ. Since the practical value of strophanthus as a medicinal agent has been pointed out by Prof. Fraser, it has been used with considerable success in some forms of heart-disease. The chemical examination showed that its activity is due to a glucoside, which has been named Strophanthin. The wanika arrow poison has been examined physiologically by Dr Sydney Ringer and chemically by Mr A. W. Gerrard. Its active principle, a glucoside, was found to resemble strophanthin in its action. Chemically also, as obtained by Mr Gerrard, it seems to be identical with strophanthin.@@2 It is soluble in alcohol and water, but insoluble in ether and chloroform ; it evolves ammonia when heated with soda-lime, but gives only a slight brown coloration when treated with strong sulphuric acid.

Both *S. hispidus* and *S. Kombe* have hairy seeds with a slender thread-like appendage, terminating in a feathery tuft of long silky hairs, the seeds of the former being coated with short ap- pressed brown hairs, and those of the latter with white hairs ; but in the species used at Delagoa Bay and called “umtsuli” the thread-like appendage of the seed is absent. According to infor­mation furnished by Messrs T. Christy & Company of London, and obtained from a correspondent on the Zanzibar coast, the natives pound the seeds into an oily mass, which assumes a red colour, portions of this mass being smeared on the arrow immedi­ately behind the barb.

See *Jcοnes Plantarum,* No. 4, 1870; Pelikan, *Arch. Gen. de Médicine,* July 1865, p. 115; Van Hasselt, *Arch. Neerl, des Sc.,* [2], vii., 1872, p. 161; *Arch.de Physiol.,* No. 5, 1872, p. 526 ; *Rapport sur l'Inaye,* Paris, 1877, 8vo.

STROUD, a market-town of Gloucestershire, is situated on the Swindon and Gloucester branch of the Great Western Railway, on a branch of the Midland Railway, and on the Thames and Severn Junction Canal, 10 miles south of Gloucester and 30 north-east of Bristol. It is picturesquely situated on an eminence environed by higher hills, but is built in a somewhat straggling and irregular fashion. Among the principal buildings are the town-hall, built in the reign of Elizabeth, the Lansdown hall (1879), the Badbrook hall (1869), with reading-room and large room for concerts, the subscription rooms (1834), and the hospital, erected in 1875 at a cost of £8754, to replace the dispensary erected in 1823. The town is the principal seat of the west of England cloth manufacture, and possesses very extensive mills. There are also silk mills, scarlet-dye works, breweries, logwood-crushing mills,

and flour-mills. Stroud at the time of the Norman survey was part of Bisley parish, from which it was separated in 1304. The local board was established in 1857. The population of the urban sanitary district (area 999 acres) in 1871 was 7082, and in 1881 it was 7848.

STRUENSEE, Johann Friedrich, Count (1737— 1772), Danish statesman, was of German extraction, and was born August 5, 1737, at Halle, where his father Adam Struensee, of some eminence as a hymn writer, was pastor. He graduated M.D. at Halle in 1756, and obtained the office of physician to the town of Altona through the influence of his father, who had removed thither. On account, however, of a change in his religious views he quarrelled with his father, and for some time he led an unsettled life, until in 1768 he was appointed personal physician to the young king, Christian VII. of Denmark, whom he accompanied on a tour through England, France, Holland, and Germany. The influence he exercised over the almost imbecile king awakened at first the jealousy of the queen, Caroline Matilda, a daughter of George II., but, having had occasion to attend her for a severe malady, he won her complete confidence also, and became equally the favourite of both. When therefore in 1770 he was appointed master of requests, he virtually took the government of the kingdom into his own hands, and on the 20th September the council of state was superseded. Though acting as an absolutist, his sympathies were democratic, and he used his position to promote the general benefit of the people and to curb the influence of the nobility. The extent of his reforms, and the sudden­ness with which they were introduced, had all the practical effect of a revolution. They included the enfranchisement of the peasants, complete religious toleration, the abolition of commercial restrictions, the reorganization of the army, and the introduction of examinations for public offices. His reforms were received with consternation, and a con­spiracy was entered into to effect his overthrow. The queen dowager persuaded Christian VII. that Struensee was carrying on an intrigue with the queen, and had entered into a plot to assassinate him, in order that he might rule as regent. He and his friend Count Brandt were consequently arrested on 20th February 1772. The attempt to prove that he had been unfaithful in his duty as minister to the king failed, but he did not deny the *liaison* with the queen, and he and Count Brandt were both beheaded and quartered on the 28th April (see Denmark, vol. vii. p. 87).@@3

See *Leben und Begebenheiten der Grafen Struensee und Brandt,* 1772; *Memoirs of an Unfortunate Queen,* London, 1776 ; Host, *Struensee og hans Ministerium,* Copenhagen, 1824 ; Jenssen-Tusch, *Lie Verschwörung gegen die Königin Karoline Mathilde und die Grafen Struensee und Brandt, nach bisher tingedrückten Original­acten,* Leipsic, 1864; Wraxall, *Life and Times of Queen Caroline,* 1864 ; K. Wittich, *Struensee,* Leipsic, 1879.

STRUVE, Friedrich Georg Wilhelm (1793-1864), astronomer, was born at Altona on April 15, 1793. In 1808 he entered the university of Dorpat, where he first studied philology, but soon turned his attention to astronomy. In 1813 he was appointed observer in the new university observatory and a few years later professor of astronomy. He remained in Dorpat, occupied with researches on double stars and in geodetic work, till 1839, when he removed to Pulkova, near St Petersburg, as director of the new Central Observatory. Here he con­tinued his activity until he was obliged to retire (in 1861) owing to failing health. He died at St Petersburg on November 23, 1864.

@@@1 See *Proc. Roy. Soc. Edin.,* 1869-1870, p. 99 ; reprinted in *Jour. Anat. and Physiol.,* vol. vii. pp. 140-155.

@@@2 *Pharm. Jour.,* [3], xi. pp. 834, 835.

@@@3 Carl Gustav Struensee von Carlsbach, elder brother of Johann Friedrich, born at Halle 18th August 1735, attained high eminence in the service of Prussia. He was ennobled in 1789, became minister of finance and president of the excise department in 1791, and died at Berlin 17th October 1804.