

The line at 636 is in the red just at the end of the continuous spectrum, and as yet no origin has been found for it, although it has been observed as a bright line in the Limerick meteorite at the temperature of the oxyhydrogen blow-pipe.

This star therefore gives a continuous spectrum due to radiation from meteorites, and on this we get bright carbon (with one carbon band appearing separate in the blue), with bright lines of iron, manganese, sodium, and some as yet undetermined substance giving a line at 636 in the oxyhydrogen blow-pipe.

Wolf and Rayet's results are given in the *Comptes rendus*, vol. lxx. p. 292.

Dr. Vogel's are from the *Publicationen des Astrophysikalischen Observatoriums zu Potsdam*, vol. iv. No. 14, p. 19.

The above are only given as examples of the seven bright-line stars explained in the lecture.

(To be continued.)

THE ROYAL SOCIETY SELECTED CANDIDATES.

THE following fifteen candidates were selected on Thursday last by the Council of the Royal Society to be recommended for election into the Society. The ballot will take place on June 7, at 4 p.m. We print with the name of each candidate the statement of his qualifications:—

THOMAS ANDREWS, F.R.S.E.,

F.C.S., Assoc.M.Inst.C.E. Ironmaster and Metallurgist. Awarded by the Institution of Civil Engineers, for original metallurgical and physical researches, a Telford Medal and a Telford Premium, Session 1884; again a Telford Premium, Session 1885; and another Telford Premium, Session 1886. Author of the following eighteen papers:—In Proc. Roy. Soc. Lond. (four papers), "Electromotive Force from difference of Salinity in Tidal Streams," "Action of Tidal Streams on Metals during diffusion of Salt and Fresh Water," "Reversals of Electromotive Force between Metals of High Temperatures in Fused Salts," "Observations on Pure Ice and Snow" (a determination of their relative conductivity for heat, and the great contraction of ice at extremely low temperatures, &c.); Trans. and Proc. Roy. Soc. Edin. (four papers), "On Relative Electro-chemical Positions of Iron, Steels, and Metals in Sea Water," "Apparent Lines of Force on passing a Current through Water," "Resistance of Fused Halogen Salts," "Electromotive Force between Metals at High Temperatures"; Proc. Inst. Civ. Eng. (four papers), "On Galvanic Action between Metals long exposed in Sea Water," "Corrosion of Metals long exposed in Sea Water." Author of an investigation on "Effects of Temperature on Strength of Railway Axles," Part I, II., and III., conducted by the author at a cost of nearly £800, to determine on a large scale the resistance of metals to a sudden concussion at varying temperatures down to zero F. Author also of papers "On Variations of Composition of River Waters" (Chem. Soc., 1875), and "On Curious Concretion Balls from Colliery Mineral Waters" (Brit. Assoc. Rep., Chemical Section, 1879), and "On Strength of Wrought Iron Railway Axles" (Trans. Soc. Eng., 1879; a premium of books awarded for this paper). At present engaged on a research "On some Novel Magneto-Chemical Effects on Magnetizing Iron," and "On the Construction of Iron, Steels, and Cast Metals at Low Temperatures, -50° F.," and "On the Viscosity of Pure Ice at -50° F., &c."

JAMES THOMSON BOTTOMLEY, M.A.,

Demonstrator of Experimental Physics in the University of Glasgow. After being several years with Dr. Andrews in Belfast, as pupil, and as assistant afterwards, he acted as Demonstrator in Chemistry in King's College, London, under Dr. W. A. Miller, and subsequently as Demonstrator and Lecturer in Natural Science, under Prof. W. G. Adams, till 1870, when he came to his present post in the University of Glasgow. Author of "Dynamics," for the Science and Art

Department; "Hydrostatics," ditto; "Mathematical Tables for Physical Calculations;" Essay on the Progress of Science since 1833 ("Conversations-Lexicon"); all the articles on Electricity and Magnetism in Moxon's "Dictionary of Science." Also of many scientific articles describing his own experimental researches, including "Thermal Conductivity of Water" (Phil. Trans., 1881); "Permanent Temperature of Conductors, &c." (Proc. Roy. Soc. Edin.), &c.

CHARLES VERNON BOYS,

A.R.S.M. Demonstrator of Physics, Normal School of Science and Royal School of Mines. Author and joint-author of the following:—"Magneto-Electric Induction" (Proc. Phys. Soc., 1879 and 1880); "An Integrating Machine" (Proc. Phys. Soc., 1881); "Integrating and other Apparatus for the Measurement of Mechanical and Electrical Forces" (Proc. Phys. Soc., 1882); "Apparatus for Calculating Efficiency" (Proc. Phys. Soc., 1882); "Measurement of Curvature and Refractive Index" (Proc. Phys. Soc., 1882); "Vibrating Electric Meter" (Proc. Roy. Inst. 1883); "New Driving Gear" (Soc. Art. Lect., 1884); and other papers.

ARTHUR HERBERT CHURCH, M.A. (Oxon.),

F.C.S., F.I.C. Professor of Chemistry in the Royal Academy of Arts. Sometime Professor of Chemistry in the Royal Agricultural College, Cirencester. Researches in Animal, Vegetable, and Mineral Chemistry, e.g. Turacin, an animal pigment containing copper (Phil. Trans., 1869); Colein, the pigment of *Coleus Verschaffeltii* (Journ. Chem. Soc., 1877); Aluminium in certain Cryptogams (*Chemical News*, 1874); Vegetable Albinism (Journ. Chem. Soc., 1879, 1880, 1886, Pts. I.-III.); New Mineral Species, Churchite, Tavistockite, Bayldonite (*ibid.*, 1865); Namaqualite (*ibid.*, 1870); Analysis of Mineral Phosphates and Arseniates (*ibid.*, 1868, 1870, 1873, 1875, &c.; Proc. Roy. Irish Acad., 1882), &c.

ALFRED GEORGE GREENHILL, M.A.,

Professor of Mathematics for the Advanced Class of Artillery Officers at Woolwich. Was Second Wrangler and bracketed Smith's Prizeman in 1870. Has been Moderator and Examiner for the Mathematical Tripos, University of Cambridge, in 1875, '77, '78, '81, '83, '84. Author of "Differential and Integral Calculus" (1886); Article on Hydromechanics in the "Encyclopædia Britannica." Also of the following papers, in the Proceedings of the Royal Artillery Institute:—"Rotation required for Stability of Elongated Projectiles" (vol. x); "Motion in Resisting Medium" (*ibid.*); "Trajectory for Cubic Law of Resistance" (vol. xiv.); "Reduction of Bashforth's Experiments" (vol. xv.); "Siacci's Method for solving Ballistic Problems" (vol. xiv.). In the *Journal de Physique*:—"Sur le Magnétisme induit d'un Ellipsoïde creux" (1881). *American Journal of Mathematics*:—"Wave Motion in Hydrodynamics" (vol. ix.). In the *Engineer*:—"Screw-propeller Efficiency" (1886). In the *Quarterly Journal of Mathematics*:—"Precession and Nutation" (vol. xiv.); "Plane Vortex Motion" (vol. xv.); "Motion of Top" (*ibid.*); "Motion of Water in Rotating Parallelopiped" (*ibid.*); "Fluid Motion between Confocal Ellipsoids" (vol. xvi.); "Solution by Elliptic Functions of Problems in Heat and Electricity" (vol. xvii.); "Functional Images in Cartesians" (vol. xviii.); "Complex Multiplication of Elliptic Functions" (vol. xxii.), and others. In *Messenger of Mathematics*:—"Fluid Motion" (vols. viii.-x.); "Lord Rayleigh's Theory of Tennis Ball" (vol. ix.); "Period Equation of Lateral Vibrations" (vol. xvi.); "Sunmer lines on Mercator's Chart" (*ibid.*); "Solution of Cubic and Quartic" (vol. xvii.). In the Proceedings of the Cambridge Philosophical Society:—"Rotation of Liquid Ellipsoid" (vols. iii., iv.); "Green's Function for Rectangular Parallelopiped" (vol. iii.); "Integrals expressed by Inverse Elliptic Functions" (*ibid.*); "Conjugate Functions of Caustics" (vol. iv.); "Greatest Height a Tree can grow" (*ibid.*); "Complex Multiplication of Elliptic Functions" (vols. iv., v.). In Proceedings Institution Mechanical Engineers:—"Stability of Shafting" (1883).

LIEUT.-GENERAL SIR WILLIAM FRANCIS DRUMMOND JERVOIS, R.E., G.C.M.G.,

Governor and Commander-in-Chief of New Zealand. Distinguished as a Military Engineer. From 1841 to 1848 employed in South Africa, during which time he erected important military

works, and added largely to the topographical knowledge of that part of the world, discovering the true feature of the Quathlamba Mountains, and making a minute topographical survey of Kaffraria; his map, published by E. Stanford, being a wonderful delineation of most difficult and rugged country. For nearly twenty years, from 1856 to 1875, employed in the designing and execution of the fortifications of the Empire at a most critical period, when, owing to the introduction of iron armour, a complete revolution took place in matters relating to ships, forts, and artillery. Was a member of the Scientific Commission (1861-62, &c.) appointed to investigate the subject of the application of iron armour to ships and forts. Governor of Straits Settlements, 1875-77. In 1877 selected to advise the Governments of Australia on the defence of their principal harbours. His recommendations have been adopted and carried out. In 1877 appointed Governor of South Australia, and in that capacity, as also in that of Governor of New Zealand (since 1882), has promoted the progress of Science in various ways.

CHARLES LAPWORTH,

Professor of Geology in the Mason Science College, Birmingham; Hon. LL.D. (St. Andr.). Most important contributions to the right understanding of the stratigraphy of the North-West Highlands and the Southern Uplands of Scotland, and investigations of the Palæozoic and other strata, as published in his papers on "The Moffat Series," "The Girvan Succession," "The Stratigraphy and Metamorphism of the Dunes and Eriboll District," the "Secret of the Highlands," the "Close of the Highland Controversy," "Discovery of the Cambrian Rocks in the Neighbourhood of Birmingham," and on "The Classification of the Lower Palæozoic Rocks," &c.,—papers published between 1878 and 1887 in the *Quart. Journ. Geol. Soc.*, and the *Geol. Mag.* Also for his Palæontological work, especially among the Rhabdophora, mainly published in six papers between 1873 and 1887. Recipient of the Murchison and of the Lyell Funds, and of the Bigsby Medal of the Geological Society.

T. JEFFREY PARKER,

Professor of Biology. Author of the Memoirs enumerated below. Distinguished as a Comparative Anatomist and as a Teacher. Has introduced an important new method of preserving the skeletons of cartilaginous fishes for museum purposes, and has rendered service to the cause of Science in the Colonies by his creation of the Otago Museum, and by his popular lectures and addresses. He has published thirty-three original papers on Biological subjects in the Proceedings and Transactions of various Societies—Royal, Zoological, Royal Microscopical, &c. Amongst these may be mentioned the following, viz.:—"On the Stomach of the Fresh-water Cray-fish," "On the Stridulating Organ of *Palinurus vulgaris*," "On the Intestinal Spiral Valve in the Genus *Raia*," "On the Histology of *Hydra fusca*," "On the Venous System of the Skate," "On the Osteology of *Regalecus argenteus*," "On the Blood-vessels of *Mustelus antarcticus*," &c.

JOHN HENRY POYNTING, M.A., B.Sc.

Professor of Physics in the Mason College, Birmingham. Author of the following papers:—"On a Method of Using the Balance with great Delicacy" (*Proc. Roy. Soc.*, vol. xxviii.); "On the Graduation of the Sonometer" (*Phil. Mag.*, 1880); "On a Simple Form of Saccharimeter" (*ibid.*, 1880); "On Change of State: Solid-Liquid" (*ibid.*, 1881); "On the Connection between Electric Current and the Electric and Magnetic Inductions in the surrounding Field" (*Proc. Roy. Soc.*, vol. xxxviii.); "On the Transfer of Energy in the Electro-magnetic Field" (*Phil. Trans.*, 1884, Part II.).

WILLIAM RAMSAY,

Ph.D. (Tüb.). F.C.S., F.I.C. Professor of Chemistry, University College, London. President of the Bristol Society of Naturalists, and of the Bristol Section of the Society of Chemical Industry. Distinguished as a Chemist, and especially for his researches in Chemical Physics. Author of the following papers:—"Orthotoluic Acid and its Derivatives" (*Liebig's Annalen*, 1872); "Picoline and its Derivatives" (*Phil. Mag.*, 1876-78); "The Oxidation Products of Quinine and allied Alkaloids" (*Journ. Chem. Soc.*, 1878-79); "Specific Volumes" (*ibid.*, 1879-81); "The Volatilization of Solids" (*Phil. Trans.*,

Pt. I., 1884); "The Vapour Pressures of Solids and Liquids" (*Phil. Trans.*, Pt. II., 1884); "A Study of the Thermal Properties of Alcohol" (*Proc. Roy. Soc.*, vol. xxxviii., p. 329); "On Evaporation and Dissociation" (Preliminary Notice, *Rep. Brit. Assoc.*, 1884).

THOMAS PRIDGIN TEALE, M.A. (Oxon.),

F.R.C.S., 1857. Surgeon to the Leeds General Infirmary. Late Lecturer on Surgery, Leeds School of Medicine. Member of the General Medical Council. Eminent as a Sanitary Reformer, and Surgeon and Ophthalmologist. Author of—(a) various Papers and Lectures bearing upon Public Health and Sanitary Reforms, among which are:—(1) "Dangers to Health in our own Houses," a Lecture at the Leeds Lit. and Phil. Soc., 1877; (2) "Dangers to Health: a Pictorial Guide to Domestic Sanitary Defects," 4th ed., 1883 (also in French and German); (3) "Economy of Coal in House Fires," 1882; (4) "Address on Health" (dealing with the effects of Modern Educational Systems upon Health), delivered as President of the Health Section of the Social Science Congress at Huddersfield, 1883. (b) Papers of value in Surgery and Ophthalmology, extending from 1850 to 1885—(1) "On the Treatment of Lachrymal Obstructions, with suggestions to use Bulbed Probes" (*Med. Times and Gaz.*, 1860); (2) "On the Relief of Symblepharon by the Transplantation of Conjunctiva" (*Ophth. Hosp. Rep.*, vol. iii., and Report of the International Ophthalmic Congress in London, 1872); (3) "On Extraction of Soft Cataract by Suction" (*Ophth. Hosp. Rep.*, vol. iv.); (4) "The Relative Value of Atropine and Mercury in Acute Iritis" (*ibid.*, vol. v.); (5) "Enucleation of Nævus" (*Trans. Med. and Chir. Soc.*, 1867); (6) "On Atrophy induced by Cicatrix" (*Brit. Med. Journ.*, 1867); (7) "On the Stimulation of Hip Disease by Suppuration of the Bursa over the Trochanter major" (*Clin. Essay*, No. 2, *Lancet*, 1870); (8) "Ovariectomy during Acute Inflammation of the Cyst" (*Lancet*, 1873); (9) "Ovariectomy in extremis" (*Clin. Essay*, No. 4, *Lancet*, 1874); (10) "Exploration of the Abdomen in cases of Obstruction of the Bowel" (*Clin. Essay*, No. 5, *Lancet*, 1875); (11) "On the Treatment of Vesical Irritability and Incontinence in the Female, by Dilatation of the Neck of the Bladder" (*Clin. Essay*, No. 6, *Lancet*, 1875); (12) "The Surgery of Scrofulous Glands" (*Med. Times and Gazette*, 1885).

WILLIAM TOPLEY,

F.G.S., Assoc. Inst. C.E. Student of the Royal School of Mines, 1858-61. For twenty years engaged in the Geological Survey; and has mapped parts of Kent, Surrey, Durham, Northumberland, &c., with illustrative sections and memoirs. Author of a general Memoir on the Geology of the Weald of Kent and Sussex. Author of various papers in *Quart. Journ. Geol. Soc.*; of a paper on the Relation of Geology to Agriculture, in *Journ. Roy. Agric. Soc.*; and on the Channel Tunnel, in *Quart. Journ. Sci.* Assisted Dr. Buchanan in a Report to the Privy Council Medical Officer, on the Distribution of Phthisis as affected by dampness of soil. Secretary (1872-81) of the Geol. Section of Brit. Assoc. Member for England of the Committee for preparing an International Geological Map of Europe. Editor of the *Geological Record*. President, Geologists' Association. Author of Report on "The National Geological Surveys of Europe" (*Brit. Assoc.*, 1884).

HENRY TRIMEN, M.B. (Lond.),

F.L.S. Director of the Royal Botanic Gardens, Ceylon. Devoted to the study of Botany, systematic, descriptive, economic, geographical, and historical. Editor of the *Journal of Botany*, 1872-79. Author (in conjunction with Mr. W. T. Thiselton Dyer, F.R.S.) of "Flora of Middlesex" (1869); of the Botanical portion of Bentley and Trimen's "Medicinal Plants" (1875-80); and of more than sixty papers on botanical subjects, including:—"Descriptions and Critical Observations on the Successive Additions to the British Flora" (*Journ. of Bot.*, 1866-79); "The *Juncaceæ* of Portugal" (*ibid.*, 1872); "*Spenceria*, a new genus of *Rosaceæ*" (*ibid.*, 1879); "*Phyllorachis*, a new genus of *Gramineæ*" (*ibid.*); "Notes on *Ondinea* and *Boea*" (*Linn. Soc. Journ.*, 1877-79); "Systematic Catalogue of the Phanerogams and Ferns of Ceylon" (*Journ. Asiatic Soc. Ceylon*, 1885); "Notes on the Flora of Ceylon, with Descriptions of many new species" (*Journ. of Bot.*, 1885); "Hermann's Ceylon Herbarium and Linnaeus's 'Flora Zeylonica,'" being a critical examination of the plants of Hermann described by Linnaeus (*Linn. Soc. Journ.*, 1887); "Report to

the Madras Government on the Cinchona Plantations of that Presidency" (1883); "Annual Reports of the Botanic Gardens, Ceylon" (1880-85).

HENRY MARSHALL WARD, M.A.,

F.L.S. Fellow of Christ's College, Cambridge. Professor of Botany, Royal Indian Engineering College, Cooper's Hill (Forestry Branch.) Distinguished for his researches in Histological and Cryptogamic Botany. Appointed by the Secretary of State for the Colonies to visit Ceylon, 1879-81, to investigate the Coffee-Leaf Disease. Has published numerous researches, of which the following are the more important:—"On the Embryo-sac and Development of *Gymnadenia conopsea*" (*Quart. Journ. Micros. Sci.*, 1880, pls. 3); "A Contribution to our knowledge of the Embryo-sac in Angiosperms" (*Journ. Linn. Soc.*, 1880, pls. 9); First, second, and third Reports on the Coffee-Leaf Disease, Ceylon, 1880-81 (*ibid.*); "Researches on the Morphology and Life-history of a tropical Pyrenomycetous Fungus (*Asterina*)" (*Quart. Journ. Micros. Sci.*, 1882, pls. 2); "Observations on the genus *Pythium*" (*Quart. Journ. Micros. Sci.*, 1884, pls. 3); "On the Structure, Development, and Life-history of a tropical Epiphyllous Lichen (*Strigula complanata*)" (*Trans. Linn. Soc.*, 1883, pls. 4); "On the Morphology and the Development of the Perithecium of *Meliola*, a genus of tropical Epiphyllous Fungi" (*Phil. Trans.*, 1883, Pls. 3); "On the Structure and Life-history of *Eutyloma Ranunculi*" (*Phil. Trans.* 1887, pls. 4); "On some points in the Histology and Physiology of the Fruits and Seeds of the genus *Rhamnus*" (*Annals of Botany*, 1887, pls. 2). Translator of "Lectures on the Physiology of Plants," by Julius von Sachs (Clarendon Press, 1887).

WILLIAM HENRY WHITE,

Assistant Controller and Director of Naval Construction. Charged with principal responsibility for design and construction of all ships of the Royal Navy. Author of a "Manual of Naval Architecture," adopted as a Text-book in the Royal Naval College, issued to the Royal Navy, translated into German and Italian, and officially issued to both fleets. Author of numerous papers on the science and practice of Shipbuilding, most of these being published in the Transactions of the Inst. of Naval Architects, of which he is a Member of Council. In these papers there is a large amount of original scientific work, notably in "Calculations for the Stability of Ships," 1871 (written jointly with Mr. M. John); "The Geometry of Metacentric Diagrams," 1878; "The Rolling of Sailing Ships," 1881; "The Course of Study at the Roy. Nav. College," 1877. Engaged in extensive theoretical investigations and experiments on the Structural Strength of Ships, and the Strains to which they are subjected at sea. Many of the results published in the "Manual of Naval Architecture" and *Trans. Inst. Nav. Architects*. Has had much to do with the extension of systematic observations of rolling, pitching, and general behaviour of H.M. ships at sea, from which much good has resulted to Ship-design, and valuable additions have been made to trustworthy information on Ocean Waves. Has also been able to render good service to the general extension of scientific methods of observing and analyzing the steam trials and turning trials of H.M. ships. Was closely associated for some years with the late Mr. Froude, and with the practical development in the designs of H.M. ships of the principles deduced from model experiments originated and conducted by Mr. Froude, which experiments are now superintended by the late Mr. Froude's son, Mr. R. G. Froude. Is the designer of some of the swiftest ships afloat, both armoured and unarmoured, in which designs wide departures were made from previous practice. Is a member of the Inst. Civ. Eng.; of the Council of the Inst. Naval Architects; Hon. Mem. of the N.E. Coast Inst. of Engineers and Shipbuilders; Member of the Roy. Unit. Serv. Inst. Has diploma as Fellow of the Royal School of Naval Architecture (highest class). Professor of Naval Architecture at South Kensington, 1871-73, and at Royal Naval College, 1873-81.

THE ISLANDS OF VULCANO AND STROMBOLI.

IN the spring of last year, accompanied by my friend Signor Gaetano Platania, I passed a month in a geological ramble through the Æolian Islands. In con-

sequence of such a short stay, no observations were carried out with sufficient detail and accuracy to be worthy of publishing, especially after the many important observations that we already possess from Spallanzani to Judd. Unfortunately, the isolated position of the group, and the absence of any sufficiently qualified local observer, render it impossible to have continuous records of the vulcanological and seismological phenomena of the islands; in fact, what little is known has come from the few scientific travellers who from time to time visit this out-of-the-way locality. It is for that reason, therefore, that the following notes have been written, in the hope of saving a few of the links in the broken chain of the record of the two active volcanoes of Stromboli and Vulcano.

We arrived at Vulcano on May 24, 1887, and left the island on May 28. The eruption that had occurred during February and two following months of 1886 had drilled out the bottom of the crater, so that the lower half of the path (on the west side) leading down to the bottom of the crater had been removed, and its lower end terminated abruptly in a cliff sheer down to the crater bottom. In consequence we were unable to descend, but we could on two days get a good view of the crater bottom. Much hissing and blowing off of steam was going on from the fissures of the floor of the crater, which was covered by a layer of purplish-gray ash washed down from the sloping sides. The edges of the fissures in the bottom and lower part of the crater sides were covered by a yellow crust of what was no doubt sulphur, boric acid, &c.

On the somewhat flattened ridge forming the northern lip of the crater, and not very far from the head of the celebrated obsidian lava stream, was a very large fumarole emitting a strong and large jet of steam under pressure, having about the size and force of that of the *bocca grande* of the Solfatara. With our sticks we removed some of the stones choking the hole, which on their cooler parts were covered with deposits of sulphur and realgar. When this was exposed to the full jet of steam, the minerals were melted, and blown away or over the surface of the blocks, forming a kind of reddish varnish or patina, whilst a rain of drops was thrown into the air, so that our clothes and hats were bespattered with beads of a variable mixture of sulphur and realgar. To the east side, where are distinguishable three crater rings, a considerable number of fumaroles exist, depositing chiefly sulphur, but also boric acid where hottest. Mr. Narlian, a resident in the island, says that not since the 1886 eruption "has the crater entered into its former quiescent condition."

On the upper portion of the northern slopes of the cone, to the east of the obsidian stream, all the ground is fumarolic, and choked with sulphur, where that mineral is extensively quarried.

Vulcanello seems on the verge of extinction, it being possible to find only slightly warm exhalations of watery vapour in a few fissures.

During the days we were at Vulcano we noticed that the apparent quantity of vapour emitted had a very marked relationship to the moisture of the atmosphere, and therefore, indirectly, to the winds. The same we also observed to be the case at Vulcano as we saw it from time to time during our stay on the Island of Lipari.

June 1, 2, and 3 were spent at Stromboli. In ascending the volcano, we, on leaving the town, skirted the northern coast of the island, and after passing the Punta Labronzo commenced the ascent, gradually approaching the north-east limit of the Sciarra. It is a track that passes chiefly over hard rock, and to be strongly recommended in preference to any other paths, which are mostly over loose materials. Skirting the crater, one walks along the ridge of the mountain which overhangs and partly hides the crater; we commenced to descend a little on the south side of the volcanic mouth, until we arrived at a small pinnacle of rock, where a good view of the crater was