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asio accipilrinus Fallas dar 1 112 A 1 money fer us. Haloyon cin amo, in mus cula is I awilitie me ana Heleyon al picilla (Dur a +). Remain interface Collocilia rich hand Thurbe. Clare or estaleti anous Scurveapillas Phinidura urlanite Costalet anous stolielles (xi : 5. Thyingra Trey cineti Cust let. Calific nixthitzi Huset. Harlly, Lygis alla kittlet, itta lest. Sula sula + E. Inscottix Corver Kubaryi Reichenow Firequita agrila Myzomila ribrata (Lesson). Phaiton Colle lunes & and in. Holeropo conspicillata (Kitt.). Saw a small Shearcaler the Cherosephains accorning livet La visa be fer we reathed Tham. in the reeds of the eign aga near Haloyour a amounter. I . f. fat. .Jana, When a Kixxlilia . 7 fffad. fine-Shore brids; Lygi a cha Kirlitzi. & dd. Ardelta sine is Philopus roscient il & balt fad. Demilaretta sec. a tealtrealia lucilitaga à ad. A 4 hottoernelia ouveloni Philipide antariae falfal. Ochilin na 2 cineraus Mying adrige di Sal, Son, ?. Hallinula oblorofus. y + + clas Mitorale I 3 & f sino Simosa Capponica bace: Trasle of a conspir that all shots of July 20, 1905. Numerius phaeopus va; salis Gallingo megala Doats, including the will braders; two Hyteraelitis by 1.2. " end, which elarget lim + for got twhen land the Decalarda syn inoca

Out. Selfred Worm Groop" Dr. 8th Cavalry. Paul biles on Fryan Muy 25.

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Manuals of Tuam. Heral: Filying Hox called Harrihi by the natives. Oteropus Kerandreni 2 4.J. Le small insectivorous bat, Emballonura Servicandata Peale lives in paves. Native name: Payésyes! Mus decemanus. House Rat. Mus museulus L. House Mouse. On introduced deer, Cervus mariannus Desm. Domestic cenimals: Buffalo, cattle, horses, mules, Juga, goots, cats, and dogs . _ 11

American Men of Science

A BIOGRAPHICAL DIRECTORY

EDITED BY J. McKEEN CATTELL,

Professor of Psychology in Columbia University; Editor of Science and of The Popular Science Monthly. [From the Editor's Preface]

This biographical directory of American Men of Science was begun as a manuscript reference list for the Carnegic Institution of Washington, which made an appropriation of \$1,000 toward the elerical and office expenses. It is hoped that the publication will be a contribution to the organization of science in America. There is here given for the first time a fairly complete survey of the scientific activity of a country at a given period. As a reference book for the field it covers, it may be even more useful in academic circles than MINERVA or Who's Who in America. But the chief service it should render is to make men of science acquainted with one another and with one another's work. There scarcely exists among scientific men the recognition of common interest and the spirit of cooperation which would help to give science the place it should have in the community. It is fully as important for the nation as for men of science that scientific work should be adequately recognized and supported. We are consequently in the fortunate position of knowing that whatever we do to promote our own interest is at the same time a service to the community and to the world.

There are included in the directory the records of more than four thousand men of science, and it is believed that the entries are tolerably complete for those in North America who have carried on research work in the natural and exact sciences.

A star is prefixed to the subject of research in the case of about a thousand of the biograph-These are the thousand students of the natural and exact sciences in United States whose work is supposed to be the most important. In each of the twelve principal sciences the names were arranged in the order of merit by ten leading students of the science. The average positions and the probable errors were then calculated, so that in each science the order of merit was determined together with its validity.

The blanks were sent in all to about ten thousand who might have contributed to the advancement of science and from the replies the names included have been selected. As many as four requests were sent to those who it was believed should be included, when they did not reply to previous applications. Proofs of all the biographies were submitted for correctiona second and a third copy having been sent when necessary - and revised proofs were sent after the corrections had been entered.

It was intended that each entry should contain information, as follows:

(1) The full name with title and mail address, the part of the name ordinarily omitted in correspondence being in parentheses.

The department of investigation given in italies.

The place and date of birth.

Education and degrees.

Positions with dates; the present position being given in italies.
Temporary and minor positions.
Honorary degrees and other scientific honors.
Membership in scientific and learned societies.

Chief subjects of research, those accomplished being separated by a dash from those in progress.

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AMERICAN MEN OF SCIENCE

A

Aaron, S(amuel) Frank, 23 S. 34th St, J, Philadelphia, Pa. Entomology. Mt. Holly, N. J. March 5, 62. Common schools. Jesup scholar, Acad. Nat. Sciences, Phila, 83-84, custodian insects, 84-85; econ. entomologist, Phila. Commercial Mus, 96- Psocidie; Pseudoneuroptera; Hymenoptera; Lepidoptera; general and economic entomology; trees.—Popular entomology; the black ant; parasites of wood-boring beetles;

Abbe, Prof. Cleveland, 2017 I St, N. W, Washington, D. C. *Meteorology. New York, N. Y, Dec. 3, 38. A.B, Col. City of N. Y, 57, A.M, 60; B.S, Harvard, as of 64. Tutor math, Trinity Sch, N. Y, 57-58; asst. prof. eng, Mich. Agr. Col, 59; tntor eng, Michigan, 59-60; aid astron, U. S. Coast Surv, and with B. A. Gould at Cambridge, 60 61; resident, Poulkova Observatory, 65-66; aid, U. S. Naval Observatory, 67-68; director, Cincinnati Observatory, 68-73; prof. meteorol, and civilian asst, office of chief signal officer, U. S. A, 71-91; prof. meteorol, George Washington, 86-; prof. U. S. Weather Bur, 91-; lecturer, Hopkins, 96- Ed, 'Monthly Weather Rev'; chairman, Committee on Meteorol, Carnegie Inst, 02. Officier d'Acad, 89; hon. Ph.D, Col. City of N. Y, 91; LLD, Michigan, 88; Glasgow, 96. Delegate, Am. Forestry Cong, Cineinnati, 82; Elec. Cong. Phila, 84; Int. Meridian and Time Standard Cong. 84; Int. Meteorol. Cong. Munich, 91; Int. Cong. Physicists, Paris, 00. Nat. Acad; F.A.A. (v. pres, 90); Math. Soc; Astron. and Astrophys. Soc; Physical Soc; Metrol. Soc; Geog. Ass; assoc. mem. Elec. Eng; cor. mem. Am. Geog. Soe; Nat. Geog. Soe; Forestry Ass; Am. Hist. Ass; Philos. Soc; assoc. fcl. Am. Acad; New Eng. Metcor. Soe; Wash. Acad; cor. mem. N. Y. Acad; Boston Soc. Nat. Hist; Phila. Geog. Soe; Wash. Philos. Soe; cor. mem. Conn. Hist. Ass; Ohio Hist, Soc; N. Y. Hist, Soc; Cohumbian Hist, Soc; cor, mem. British Ass; fel. Royal Astron, Soc; fel. Royal Meteor, Soc; assoc. British Victoria Inst; Math. Verein; cor. mem. Astron. Gesell; cor. and hon. mem. Meteor. Gesell; Oester, Gesell, Meteor; Ass. française; Soc. météor. de France; Soc. Meteor. Ital. Astronomy; meteorology.—Long range predictions in meteorology.

Abbe, Cleveland, Jr, U. S. Geological Survey, Washington, D. C. Geography, Geology. Washington, March 25, 72. A.B, Harvard, 94, A.M, 96; Ph.D, Hopkins, 98; Vienna and Paris,

01-03. Prof. nat. sciences, Winthrop Nor. and Indust. Col. 98-01; aid, W. S. Geol. Surv. 03-Instr. physiog, Corcoran Sci. Sch, Washington, 95-98; asst, Md. God. Surv, 97-01; instr. gcol. and biol, Western Md. Col, 98-99; State Summer Nor. Sch. Rock Hill, S. C. 99. F.A.A; Geol. Soc; Min. Eng; Geog. Ass; Nat. Geog. Soc; Wash. Geol. Soc; Berlin Gesell, für Erdkunde. Topographic development.—Fall line of east North America; lakes of southern Scandinavia; Canadian and Baltic 'shields'; the climate of the Great Lakes region and Agaña, Guam; dietionary of geographic terms.

Abbe, Dr. Robert, 13 W. 50th St, New York, N. Y. Surgery. New York, April 13, 51. A.B. Col. City of N. Y, 70; M.D. Columbia, 74. Prof. surg. Woman's Med. Col. N. Y, 86-88; Post Grad. Med. Sch, N. Y, 88-96; elin. instr. surg. Columbia, 94 - Attending surgeon, St. Luke's Hosp,

84- F.A.A; Surg. Ass. Surgery.

Abbot, C(harles) G(recley), 36 Q St. N. E. Washington, D. C. *Astrophysics. Wilton, N. H. May 31, 72. B.S. Mass. tast. Tech, 94, M.S. Asst, Smithsonian Astrophys. Observatory, 95-96, aid, acting in charge, 96- F.A.A; Astron. and Astrophys. Soc; Wash. Philos. Soc. Infrared solar spectrum; sensitive galvanometer; osmotic pressure.—Solar physics; absolute reeording pyr-heliometer.

Abbot, Gen. Henry L(arcom), U. S. A. (retired), 23 Berkeley St, Cambridge, Mass. Engineering, Physics. Beverly, Mass, Aug. 13, 31. Grad, U. S. Mil, Acad, 54. All grades from second lieut. to col, Corps Engineers, U. S. A, 51-95 (retired by law). Col, brevet brig, and maj. gen, U. S. Vols; chairman, Gronp XVI, Centennial Expos, 76; Higher Jury of Awards, Atlanta Expos, 95; pres, Board of Consulting Engineers, Pittsburg and Lake Eric Canal, 95-96; mem. Int. Commission Engineers, New Panama Canal Co, 97-00, consulting engineer, 00 01; mem, many govt. boards. LL.D. Harvard, 86. Nat. Acad; Philos. Soc; Am. Acad; New Orleans Acad; cor, mem. Austrian Imperial Royal Geol. Soc. River and harbor improvements; coast defence; submarine mining; explosives; electricity; vertical fire; astronomy; canals; river hydraulies; climatology of the Isthmus of Panama.—The

Chagres River; the Panama Canal. Abbott, Dr. Albert H(olden), University College, Toronto, Can. Psychology. Brockville, Ont, Dec. 7, 71. A.B, Toronto, 95; Ph.D. Würzburg, 0.t. Asst. Psychol. Lab, Toronto, 95-99, instr. philos, 99-00, lecturer philos, and asst, Psychol.

Lab, 00- Psychol. Ass. Sensations of color; psychology and epistemology of Hobbes.-Color saturation in its quantitative relations; British philosophy and psychology from Bacon to the

present day.

Abbott, Dr. A(lexander) C(rever), 4229 Baltimore Ave, Philadelphia, Pa. *Hygiene, Bacteriology.
Baltimore, Md, Feb. 26, 60. Baltimore City
Col, 77; M.D. Maryland, 81; Hopkins, 84-87; Munich, 87-88; Berlin, 88-89. Asst. hygiene and bacter, Hopkins, 89-91; asst. in charge, Lab. of Hygiene, Pennsylvania, 91-96, prof. hygiene and bocler, and director, Lab. of Hygicae, 97-; director, Div. Path, Bacter, and Disinfection, Bur. of Health, Phila, 97; chief, Bur, of Realth, and pres, Board of Realth, 02-F.A.A; Ass. Path. and Bact; Soc. Bact; Am. Physicians; Physiol. Soc; Soc. Exp. Biol. and Med; Am. Med. Ass; Pub. Health Ass; Philos. Soe; Wash, Acad; Phila, Co. Med. Soc; Phila. Path. Soe; fel. Phila. Col. Physicians. Bacteriology and preventive medicine.—Certain phases of infection, intoxication and immunity.

Abbott, Dr. C(harles) C(onrad), Trenton, N. J. Zoology, Archeology. Trenton, June 4, 43. M.D., Pennsylvania, 65. Asst, Peabody Mns, Harvard, 76-89. Philos. Soc; Boston Soc. Nat. Hist; fel. Copenhagen Soc. of Antiquaries of the North. Primitive industry; natural science. - Animal intelligence; evidences of the antiquity of man

in the valley of the Delaware River.

Abbott, Prof. J(ames) F(rancis), Washington University, St. Lonis, Mo. Zoology. Greeley, Colo. Sept. 27, 76. A.B. Stanford, 99: fellow, Chicago, 03-04; A.M. Stanford, 04. Instr. English, Shigaken Shogyo Gakko, Japan, 00-01; prof. English lang, Imp. Naval Col, Etajiina, Japan, 01-03; asst. prof. zool, Washington (St. Louis), and ossoc. prof. embryol, Med. Sch, 01-Farmal ichthyology: etenophore morphology.-Formative and trophic influences in avian embryology; tropisms in pathogenic bacteria.

Abel, Prof. John J(acob), Station L. Baltimore, Md. *Pharmocology, Physiological chemistry, Cleveland, O. May 19, 57. Ph.B. Michigan, 83; Hopkins, 83-84; European universities, 84-90; M.D. Strasburg, 88. Principal, High Sch, La Porte, Ind. 79-80, supt. pub. schools, 80-82; lecturer mat. med. and therapeut, Michigan, 90-91, prof. 91-93; phormacol, Hopkins, 93- 11on. A.M. Michigan, 03. F.A.A; Physiol. Soc; Am. Physicians; Therapeut, Soc; Chem. Soc; Soc. Exp. Biol. and Med. Composition of animal tissues and fluids; function and isolation of special chemical principles of the animal organism; ethyl sulphid; carbamic acid; pigment of negro's skin.—The chemical nature of the blood-pressure-raising constituent of the suprarenal capsules.

Abrams, Dr. Albert, Southwest Corner Van Ness Ave, San Francisco, Cal. Medicine. San Franeisco, Dec. 8, 63. M.D. Heidelberg, 82; London, Berliu, Vienna and Paris, 83, 84, 97; A.M. Portland, 94. Prof. path, Cooper Med. Col, 93-98; pres, Emanuel Polyclinic, San Francisco.

Consulting physician diseases of eliest, Mt. Zion and French Hospitals, San Francisco. Am. Med. Ass; fel. Royal Micros. Soc. Heart reflex and lung reflexes of contraction and dilatation; zones of ateleetasis; the stethophonometer; light as a therapeutic agent; congelation in diagnosis and treatment.—Diseases of the heart and

Abrams, L(e)R(oy), U. S. National Museum, Washington, D. C. Bolany. Sheffield, Ia, Oct. 1, 74. A.B. Stanford, 99, A.M. 02; fellow, Columbia, 04-05. Acting prof. bot, Idaho, 99-00; asst. syst. bot, Stanford, 00-03, instr, 03-04; asst. curator, Div. Plants, U. S. Nat. Mus, 05- M.A.A; Nat. Geog. Soc; Wash. Bot. Soc; Wash. Biol. Soc; Torrey Bot. Club. Flora of sonthern California.

Acheson, Edward G(oodrich), Niagara Falls, N. Y.
*Electrometollurgy, Chemistry. Washington,
Pa, March 9, 56. Bellefonte Acad, Bellefonte, Pa. Civil engineer, 76-80; Edison's Lab, 80-82; snpt, Consol. Lamp Co. Brooklyn, N. Y. 84; electrician, Standard Underground Co. Pittsburg, 86-89; pres, Carborundum Co, 91-01; Int. Acheson Graphite Co, 00- John Scott medals, Franklin Inst, 94, 01; Grand Prix, Paris, 00; La. Purchase Expos, Ol. F.A.A; Elec. Eng; Electrochem. Soc. (manager, 02-03); Franklin Inst; London Soc. Arts. Electric furnaces and products. - Development of electric furnace methods; improvements in the methods of clay-

Adami, Prof. J(ohn) G(corge), 331 Pecl St. Montreal, Can. Pathology, Bacteriology. Manchester. England, Jan. 12, 62. Owens Col, Manehester, 77-80; A.B. Cambridge, 84; Breslau, 84-85; Owens Col, 85-87; M.B. Cambridge, 86, A.M. 87; mem. Royal Col. Surg. 87; M.D. Cambridge, 90. House physician, Manchester Royal Infirmary, 86; demonstrator path, Cambridge, 87-90, John Lucas Walker student in path, 89, lecturer, 90, fellow and director nat. science, Jesus Col, 90-92: prof. path, McGill, 92- Pathologist, Can. Dept. Agr, 97-02. A.M. M.D. McGill, 99; LL.D, New Brunswick. Soc. Nat: Ass. Path. and Baet; Soc. Bact; Physiol. Soe; Am. Physicians; Soc. Exp. Biol. and Med; Can. Royal Soc; Montreal Medico-Chirurg, Soc. (pres, 98-00); British Med. Ass; London Path. Soc: London Physiol. Soc; fel. Royal Soc; Edinburgh Royal Soc; Cambridge Philos. Soc. Cardiae, renal and hepatic pathology; heredity of disease; cansation of cancer, etc; variability of bacteria; colon bacillus; tuberculosis.— Heredity of disease; B. coli infection; experimental production of anemia; causation of goitre; degenerative processes.

Adams, Alton Dermont, P. O. Box 478, Woreester, Mass. Electrical engineering. Biddeford, Me, June 28, 64. B.S. Harvard, 97, A.M. 03, Constructing elec. engineer, 86-95; consulting engineer, 95- Elee, Eng. Electrical supply; cost

of gas and electrical supply.

Adams, Cha(rle)s C(hristopher), University of Michigan, Ann Arbor, Mich. Zoology. Clinton,

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Edited by Professors J. McKEEN CATTELL and T. D. A. COCKERELL

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Edgar a (leyander) Villearns, Major, Medical Coops,
1. D. army, Fort Totten, new York.
Department of study-e.g. Experimental evolution, animal behavior, vertebrate morphology or mollusea
Place and dite of birth & Highland Hulls, Orangeloo, New York, September 11, 1856 Reduction and degrees, including honorary degrees Medical Department of Columbia College, New York Cet., Class of 1881.
Positions with dates at which they were held
Tempovary or minor positions and honors, such as lectureships, trusteeships, scientific expeditious, membership on juries prizes, medals, etc., etc.
Membership in societies
Books with publishers and dates
Chief subjects in which research work has been published
Journals or proceedings in which research work has been chiefly published
Subjects of researches now in progress

(Officers' Individual Service Report to be rendered as prescribed in paragraph 8371, A. R., as published in G. O., No. 144, War Department, August 15, 1906.)

De Allen y Sel
Individual Service Report of Agas V. Illarus Major Heingeon, E
for the period from July 1, 1904, to June 30, 1906.
Station, Mariela, P. J.
Date, Oolober 31,1906.
Date,
To THE MILITARY SECRETARY OF THE ARMY.
(Through military channels.)
Sire:
I have the honor to report that during the period between July 1, 1904, and June 30, 1906—
1. I was present for duty with my regiment or corps, months, days.
On detached service months, days. On leave of absence Siek Leave 6 months, days.
2. Married or single, Married If married, number of minor children, two (2).
3. Name and address (street and house number, if any) of nearest relative, Mrs. E. C.
Meavy, 3/3 D. Court Dt., Circleville, Olio
4. (a) Professional or scientific study and investigation other than military, Deology.
(b) Special knowledge of any particular line of work, whatever its nature, Leccal
Biology.
5. (a) I am able to speak the following foreign languages:
o. (w) I this toole to speak the following to eight that singles.
(b) I am able to translate the following foreign languages:
6. Subjects or titles of books written or published, essays prepared, lectures delivered or papers
read, when and where: a few biological papers.
A
Remarks: During the Inceeding year Mave, at
different periods bern Chief Surgen of the
Depto of Juson and Mindanao This paper
Remarks: During the Increding year Olhave, at different periods, bear Chief Surgen of the Defts of Luzon and Mindanao This paper was, of necessity, prepared where I had not access to my Gressonal seconds. TO CERTIFY on honor that the entries herein made are gorrect.
CERTIFY on honor that the entries herein made are porrect.
Edgar H. Mearus
Major V Jurgeon, USA.
Mujor V surger w, our

On the reverse side of this sheet a succinct account of services since July 1, 1904, will be furnished, together with the dates of all occurrences connected therewith. Reference should be made to any commendatory mention contained in official documents which bear on such services, and duly authenticated copies of such documents, or extracts therefrom, may be forwarded with this report.

In the event that an officer is making this report for the first time, a statement will be included of the eugagements or actions, if any, participated in by him since his entry into service, whether as an officer or as an enlisted man.

Under "Remarks" give any necessary explanation of any answer for which the allotted space is insufficient.

INDIVIDUAL SERVICE REPORT OF

Name Cagar A Marier

Rank, regiment, or corps.) Major Oliman, Lilan

Station, Manula, 19

Date, Och. 31.1906

NOTE.—This report will be briefed by the officer making it.

The Philippine Iournal of Science.

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written, November, 1905, by colonel Philip Reade, to the following never 1
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major B. A. Byrne, 13th infintry
Major B. M. Randolph, Artillery Corps (retired)
major hunter Liggett, ill. .cc. Dept.
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1st Lieut. H. L. Cooper, 29th infantry
lat Lieut. "alber ). Bosman, and infantry
1st Lieut. William J. Hondrick, 7th Cavalry
1st Lieut. W. H. Caffey, 18th infantry
1st Liout. Arthur W. Morro, 3. 10,4.
            willian . Rodd, Str May l.,
1st Licut.
lst Licut. Amry ibbins, oth cavalry lst Licut. . . Thomas gr., lst cavalry
1st Lieut. A. H. Sunderland, Artillery Corps
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2nd Licut. Homer T. Preston, or t Infantry
      Lend. Con . and Wine Or M.
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Tri. or. dans . Tuchanan, H. S. J., (Kaxixed.) Trie in . Round ords, U. S. A., (Rational.) This can de tall in Thompson, '. '. (hetared.) Cole in Mess. I. W. Riston, 19 di Antontoj. Tiladi. Del 16 M. J. di M. W. Landi, Toposofor di Janua. Major IN 18 di D. Majorini, Did. D. A. I. jos sobn ". "Lite, Mil. Gec. Det. Lagor T. d. abrille, Pag Dept. W. st. Well L. Corse, Sty Jeff atri-Ough. Terry J. Jordana, Phil. Comme, (later, med Tr., or Tr., Cont. Jose Marie Borne, M. C., Med. Dart. Sept. duerge P. Poed, A. S., Hed. Popt. Capt. Samuel A. Strer, A. St., Med. Dept. List. Perciett Bennsti, U. S. Pev, j Toy Dept., To the co. lat Libut. Robert T. Carswell, 4. C., 1ed. D. t. lat Libut. Jesse R. Termis, A. S., Med. D. t. Lst Libut. Jesse T. Win Dusen, A. S., Med. Dopt. lot Tlent. Tongs ". Jean, A. S., Ind. Nat. lst Tiaut. Warence J. Gole, A. C., Med. T. .. Let I Land. "illian K. Davis, A. S., 14d. David. Let I Land. Long, T. Pipas, A. G., M.d. David. Let I Land. Language S. Massll, A. S., M.d. David. Ist Ligot. John We anger, A. ., led. Total and lient. Not get d. Thomas, Snain records. 2nd Tibut. Horer G. Powell, Engineer Corps. and Tlout. Aleford C. Sorly, Soth Inforte. And I laut. Oscar A. Dissell, 20th Infantry. End Tinut. Felix W. Potlow, 20th Jacks rg. Cont. Surg. Almer S. Teaner, T. T. Cont. Surp. 'Adart Oriegor, '. S. A. Capt. Fancis J. Hoester, Sub. D. H. Capt. Montheros 4. Socie, Stn Lat alry. lst Figut. Daward K. Bassee, 7th Infortage 1st light. Wigh A. Drive, Aard Teffering.

Con unications regarding the Military Order of Moro Campaigns have been written, January, 1900, by Colonel Philip Reads. Und Infantry, to the following named officers:

Ath Cavalry.

Tolonel Edgar Z. Steever

Lieut. Colonel Charles A. Varnum

Vajor Trank A. Edwards Vajor James Lockett Vajor Elon F. Willcox

Captain Tyres R. Rivers
Captain George W. Cameron
Captain George O Cress
Captain James D. Hughes
Captain Robert A. Prown
Captain Dewis H. Kochler
Captain Cecil Stewart
Captain Floyd W. Harris
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Captain Edwin B. Winans
Captain John O'Shea
Captain Samuel McP. Rutherford
Captain William D. Chitty
Captain Trederick T. Arnold
Captain Charles C. Farmer Jr.

Lat Lieut. Den W. Dorcy
Lat Lieut. Samuel A. Purvience
Lat Lieut. Douglas McCask by
Lat Lieut. Fred W. Hershler
Lat Lieut. Thomas M. Knox
Lat Lieut. William A. Austin
Lat Lieut. Joseph C. Righter Jr.
Lat Lieut. Jens E. Stedje
Lat Lieut. William M. Renziehausen
Lat Lieut. Frank I. Otis
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End Lieut. William S. Martin
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and Lieut. DeRoy D. Lewis
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and Lieut. James J. O'Mara
End Lieut. Joseph D. Park
Ind Lieut. Charence K. Lyman
End Lieut. James H. Dickey
End Lieut. Karl D. Klamm

Colonel William 1. Wallace

Lieut. Colonel Alexander Rodgers

Major Wilber E. Wilder Major Matthias W. Day Major William D. Beach (General Staff)

Chaplain William W. Brander

Captain John J. Pershing (General Staff)
Captain Michael M. McNamee
Captain Francis C. Marshall
Captain James A. Ryan
Captain William T. Johnston
Captain George C. Barnhardt
Captain Julian R. Lindsey
Captain Howard R. Hickok
Captain George W. Kirkpatrick
Captain Lincoln C. Andrews
Captain Kenzie W. Walker
Captain LeRoy Eltinge

1st Lieut. Warren W. Whiteside

1st Lieut. Sam Van Leer

Captain Henry C. Smithers

1st Lieut. Charles E. McCullough

1st Lieut. George O. Duncan

1st Lieut. George T. Bowman

1st Lieut. Francis H. Cameron Jr.

1st Lieut. William C. Tremaine.

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1st Lieut, Richard B. Going

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2nd Lieut. Charles Burnett
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Major Henry P. Moon Major Lyman W. V. Kernon Major Role et C. VanVliet Chaplain John A. Ferry

Captain Edwin A. Root
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1st Lieut. Ethelbert L. D. Preckenridge
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"idor William Lassiter Pajor Willis T. May

Major Andrew S. Rowan

Chaplain Joseph Glamens

Captain John Cotton

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Captian Charles C. Pallow

Captain Willis Uline

Captain Harry A. Grith

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let Libut. T.A. Awl.

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1st Liout. Guy E. Pucker

And Lieut. Alfred A. Tickox

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Colonel William F. Wheeler

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Major John J. Crittenden Major William C. Buttler Major Abner Pickering

Chaplain E. W. Fitz-Cerald

Captain John T. Preps
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Captain Peter Davison
Captain Orrin R. Wolfe
Captain Frederick G. Stritzinger
Captain Lorrain T. Richardson
Captain Daniel G. Perry
Captain Chauncey B. Gumphrey
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Captain George N. Bornford
Captain John R. R. Hannay
Captain Laurence A. Curtis

Lat Lieut. George S. Simonds
Lat Lieut. James Justice
Lat Lieut. Henry A. Ripley
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Lat Lieut. William S. Neely
Lat Lieut. William S. Neely
Lat Lieut. Harry Graham
Lat Lieut. John H. Baker
Lat Lieut. David A. Henkes

Captain Henry S. Wagner

2nd Lieut. William E. Roberts
2nd Lieut. Rean Walford
2nd Lleut. Vax E. Carber
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-Colonel Samuel R. Whitall

-Lieut. Colonel Richard T. Yeatman

Major Emery As Jones A.

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-Chaplain George D. Rice (Capt.)

-Capt. John P. Finley

, Capt. James T. Moore

- Capt. William C. Rogers - Capt. Matthew E. Savilla

-Capt. Paul E. Malone

-Capt. Charles F. Grain

-Capt. Thomas W. Darrah

"Capt. James A. Hutton

-Capt. John Robertson

Capt. Walter T. Bates

-1st Lieut. Hugh A. Drum

Ast Lieut. Oliver S. Enkridge

-1st Liout. Ralph McCoy

List Lieut. Frank B. Hawkins

Ast Lieut. Charles G. Bickhey

Last Lieut. William B. Gracks

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RETURN QUARTERMASTER'S SUPPLIES

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It is IMPERATIVE that articles be arranged alphabetically. Where two or more words are necessary in the name of the articles phace distinctive noun first.

This form will be used for all invoices and recelpts, making proper crasures to conform.

When prepared for use as vouchers to Return of Quartermaster's Supplies the form will be made out in quadruplicate, using typewriter and carbon process wherever practicable. Erase that portion which refers to "transportation."

The invoicing officer will sign the two parts used as invoices and transmit all four parts to the receiving officer, who will, on receipt and return them direct to the invoicing officer.

One copy of the invoice will be filed by the receiving officer as a voucher to his return and one copy of the receipt will be filed by the invoicing officer as a voucher to his return and one copy of the receipt will be filed by the invoicing officer as a voucher to his return and one copy of the receipt will be filed by the invoicing officer as a voucher to his return. The other copies will be retained by the respective officers as vouchers to retained returns.

I CERTIFY that I have this day { transferred to received from } the officer named above the articles specified in the foregoing list.

Capt and Quartermaster 4" law

(Signed in Muse...)

38180

Form No. 117. (Authorized May 24, 1905.)

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RETURN QUARTERMASTER'S SUPPLIES,

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It is IMPERATIVE that articles be arranged alphabetically. Where two or more words are necessary in the name of the article, place distinctive noun first.

This form will be used for all invoices and receipts, making proper crasures to conform.

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The invoicing officer will right the two parts used as invoices and transmit all four parts to the receiving officer, who will, on receipt of the property, accomplish the two copies used as receipts and return them direct to the invoicing officer.

One copy of the invoice will be filed by the receiving officer as a voucher to his return and one copy of the receipt will be filed by the invoicing officer as a vencher to his return and one copy of the receipt will be filed by the invoicing officer as a vencher to his return. The other capies will be retained by the respective officers as venchers to retained returns.

C 35180

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REPORT of COMPLETED CASES at _____

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Separate Reports of Sick and Wounded for Regular and Volunteer Troops should be rendered.

REMARKS.		D		ORT (DE G	SICK	A N.I.	\cup /	MOLIN	UDEL)	REMARKS.
Here note matters of general interest in relation to the medical condition of the		K	EP	ארו י	Jr c	JICK	AINI	י ע	VVOOI	V D L L		Here note the prevalence and character of diseases affecting the civilian attachés of the command, the extent of their prevalence, their probable causes, and pre-
command, as prevailing diseases, their causation, measures adopted for their prevention, etc. Also matters relating to individual cases, such as notes of autopsies,												disposing conditions. The civilian attachés include the wives and children, rela-
etc. Reports of eases should not be entered here, but should be made separately. The notes called for in this column do not relieve a medical officer from the duty												tives and servants of officers and enlisted men, as well as all other eivilians, male and female, connected with the command or permitted to live at the post, in-
of reporting specially on any of the subjects indicated should their importance			[Here st	ute name of Regi	ment or Field	Hospital (Post	or General	llospital)	with location on	last day,]		cluding departmental employees, retired and discharged soldiers, and military
require a special record. Reports relating to commands in the field should show in these "Remarks" the locations of the principal camps occupied during the			[Mero at									from the service of the United States; but the employees of contractors engaged temporarily in building or other work are not to be considered as attachés of the
month with dates of arrival and of departure.				Month							121 6	command. In addition to general remarks there may also be entered in this column short notes on points connected with the history of individual cases,
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is), Experient Jeutensie Carabortung inplus to Transportung inplus to Jangan of mine 1st and 9 NR 1906. Michiao Egriano Vintacase

Expenditures from L. M. Funds. Cangadores per time schedule # 461.55 5 Oil caux, for earrying water Vinta from Tangob to Misamis (Capt. Jervey) 1.80 10.00 " (Major Mearus) 15.00 Banco Misanis to Jimenez (Capt. Jervey) Vinta from Misanis to Overton (de) 4.00 14.00 Mineral oil Ne of anib's house for supply base one most 15.00 .95 Dejuea .40 Mineral orl Other servees: Quide Tangot to Catagan and return 2.00 Guide + 2 Aubano Cargadores Catagan To Wet. Blies 3.00 and returning (Jervey, Earle + Mearins) Guide Yangole to Misamis (May 25 + 26. Suy Lakins) 1.50 Duide Jimenez May 17 to 22 [Capt. Jewry's party) 3.00 Here of 2 Carabao, Mianis to Catagan and return June May 9 to noon 12th (3 idays) 7.00 lao doriver of carabao, returning do 1.15 Hire 3 carabas Tangob to Catagan May 10+11(2do) 6.00 3.00 " 3 taos for Caraboo I Carabao Misamis to Tangob (with nice, June 200)

553 35 Hire 2 Pack Ponies Catagan to Tangob June 11th. 2.00 4 Subanos. Cargadores for vice Tangob to Catagan 4.00 OFFES.

Purchases of Hood.

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2 specimen leopes Platka at Lucuran 1- alcohol cess 1 Traps Campbell at Mesanis 1 Botanical 1 Bedding roll Doctor Means desires to camp on mount Malinday Rations with farty of six american ammunition Tent Alif. soldiers and necessary cargadores. Wire most Boxes for shells & eggs. Extra supplies for base. peasible route and advice meluding guides to interpreters net + fishing lackle water supply above 5 and feet alcohol + formalin Soda Gala Supplies arsenie aumunition Bichloride maps Oatureal Water boiler Skinning outfet Cakuni + tow, excelsion nolebooks & pencels Conant com Loods to trade natives Whiskey 2 Ceneroids Sum oil promution Cond Thermometer

U. S. Army Transport "LOGAN"

No. 51

JUL 26 1905

Received from Major & a. Mearns

for meals from 2. 111 N 30 1905 to 3 111 20 1905

Transport Commissary.

Retained

FORM NO. 17. (Authorized April 22, 1896.)

PAY AND COMMUTATION.

26509

When an officer is absent from his station, a paymaster will, before paying him, require proof of authority for such absence.

(A. R. 1299.)

An officer will not hypothecate nor transfer a pay account not actually due. When due it may be transferred by indorsement, naming the party to whom transferred, and may he paid by the proper paymaster if satisfied of the genuineness of the officer's signature and if no stoppage or other disability as to pay prevents. The date of transfer, certified by the officer whose account it is, will appear in the indorsement. When an officer transfers a pay account, he will, at the time of transfer, communicate the fact to the chief paymaster of the department, through the paymaster who is expected to pay it. If the officer be on leave, or if his accounts be payable in Washington, the notification of transfer will be made to the Paymaster General. (A. R. 1300.)

The Secretary of War decided, under date of March 30, 1888, that an officer may forward his pay accounts a few days before maturity to a paymaster who shall hold them until maturity and then remit the amount to the officer, or, if he so request, place it to the officer's credit with the hank. The officer must be in service on the last day of the month for which the account is made.

The following indorsement will be made on the center fold of both vouchers when deposit with a bank is desired:

Place to my credit with	
(Name and location of bank.)	
(Name and rank of officer)	

Pay accounts of officers on the active or retired list, residing abroad, may be mailed at maturity direct to the paymaster stationed at or near the place where the officer keeps his hank account, and the paymaster will, with the officer's request, deposit the amount in the bank named. The letter of transmittal must be dated and mailed on or after the last day of the month for which the voucher is made. The letter should also give the post-office address to which the remittance shall be sent.

Duplicate copies of orders, either the original, or certified to by a disinterested person, granting leave of absence, sick leave, directing travel, or for commutation of quarters (first vouchers), must accompany the officer's vouchers, and the vouchers themselves must be made up and signed by the officer.

PAY AND COMMUTATION

Che United States,	IAI AI	To Edgar A. Mearus, Majorund Surgeon, Uses. Dr.					
STA	STATION.		The state of the s	T. N. Carriero	MONTHLY	Angerrato	
For commutation of quarters	Mundanao, P. J.	re 1. day of May 1904,	the 31 day of May 1904.	Rooms.	#3/2.50 Per month.	8 3/25	
For commutation of quarters	do	held day of war, 190 4.	the 31 day of May 190 4.	4	\$12.	#4229	
stationed on duty at ambordated Headquarters Defet Mindanao Mai	ment of public quarte	ers at any station, for t	he time charged.				
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(SIGNED IN DUPLICATE).			Major and	Ver	geon, U	Mu.	

*For copy of order see voucher No ______, of Paymaster ________, account for ______, 190____

The Philippine Iournal of Science.

Published by the Bureau of Science of the Government of the Philippine Islands.

EDITED BY

PAUL C. FREER, M. D., PH. D. Director of the Bureau of Science.

CO-EDITORS

RICHARD P. STRONG, M. D. Chlef of the Biological Laboratory.

H. D. MCCASKEY, B. S. Chlef of the Division of Geology and Mining.

MANILA, P. I., November 1, 1905.

SIR: By act of the United States Philippine Commission, the Bureau of Government Laboratories will in the future include not only the divisions of scientific work which heretofore have been comprised in it but also the former Mining Bureau of the Philippine Government, and the united institutions will be known as the Bureau of Science, Beginning with January 1, 1906, it is proposed to change the form of the publications which in the past have appeared as the "Bulletins of the Bureau of Government Laboratories" to a journal which will be known as the PHILIPPINE JOURNAL OF SCIENCE. This publication will include original articles by the members of the staff of the Bureau of Science as well as scientific papers submitted for publication by other officials of this Government and by individuals who are not officials. The subjects covered by the organization of the Bureau and which will find a place in the new journal will be: Researches on biological subjects, including bacteriology, pathology, and allied branches of the science relating to medicine, botany, and zoölogy; on chemistry, including topics relating to the natural products of the Islands, to analytical and synthetical work, and to physiological and biological chemistry; researches relating to the field of serums and prophylactics and on mineralogy, geology, and paleontology, including investigations of the mineral resources and mining operations of the Philippines.

The scope of this journal will be varied and, covering as it does the field of scientific work in the Philippine Islands, it will be a publication which will give a review of the work which is being accomplished and of the original results which are being obtained. Readers who wish to follow special topics only can obtain author's reprints, but it is hoped that many workers in the scientific field will be sufficiently interested in all of the advances which are being made in this most interesting tropical country to subscribe for the complete journal.

The JOURNAL will be issued in as many numbers as may be necessary during the year, with a probable minimum number of ten, so that it will appear approximately once a month. The subscription price has been placed at \$5, United States currency, per year, payable in advance; single numbers at 75 cents, United States currency; reprints at 25 cents, United States currency, per number. Where a reprint includes serial portions contained in several numbers, the entire article, bound together, can be had at one-third the total cost of the numbers of the journal involved. The first number will appear on or about January 1, 1906. ALL REMITTANCES TO BE SENT TO THE DIRECTOR OF PRINTING, MANHA, P. I.

I am, very respectfully,

Paulet rees.
Director of the Bureau of Science.

To the DIRECTO	r of Printing, Manila, P. I.
Inclosed plea	ase find $\left\{egin{array}{ll} Draft & \\ Money & Order \end{array} ight\}$ for \$5, United States
currency, in p	ayment of my subscription to the Philippine
Journal of Sc.	ence for the year 1906.
(Signed)	
Address	
City	
State	
Street and nu	mber

, 190

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¹ The first four huiletlus la the ornithological series were published by Tho Ethnological Survey under the title "Builetins of the Philipplae Museum." The other ernithological publications of the Government appeared as publications of the Bureau of Government Lahoratories.

of Amœbæ. By J. B. Thomas, M. D., Bagulo, Benguet. Biological and Scrum Laboratorics.—III. The Pathology of Intestinal Amœbiasis. By Paul G. Woolley, M. D., and W. E. Musgrave, M. D.

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36203

Mileage and expense account. Compostella trip S. O. # 115 Hradg. Dept Resudance
Buluan " 118 do

Mailed the above to Cheif Paymaster Department of Mindanas, Sept. 14, 1904. Marila Asom Rambounga on Proteins. Paid me by Capt. Irwin, at Manila, Sept. 14, 1904. accounts still due me to be sent in: -(Marila to Zamboanga. S. O. # 141, Div. Ph. July 28, 1903. I Subsistence only. If I have Capt. Brown's receipts ((received at Cantas), this has not been paid me. 2 Samboanga to Pantar S. O. 156. Dept. Mind. aug. 7, 1903. Mileage is due me on Mis.

Personal Orders affecting Station I. Par. 26, S.O. #72, Heady. Irm, a. S.O. March 27, 1903. Fort Swelling to Dan Francisco. II. San Francisco to Wille. III. Par. 1, S. O. # 141, Heady, Div. Phelipinie. July 28, 1903. Manila to Zambounga. IV. Var. 3, S.O. #155, Hadq. Dept. Mindanao, august 7,1903. Danboanga to Pantar, Mindanao. I Telegraphic instructions from Commanding General, Deft.of Mindanao, dated Sept. 27, 1903. Pantar to Malabang, theree to Varang to join Buldung Expedition. II. Velegraphie vistructions from Dept. Conds. daled Octobre 8,1903. Malabang to Special service at Bombourga. III. Verbal orders confirmed by Par. 5, S. O. # 115, Heady. Deft. of Mindanao, June 6,1904. Jamboanga to Baganga, Thence overland to Com-= postella, headwaters of agusan River, down daid min to Bulian and return to Lamboanga, allon Ahn Island of Mindanao, April 17 to May 12 VIII. Verbal orders confermed by Par. I, S.O. #118, Heady. Department of Mindanas, June 9, 1904. From Jamboanga to Buluan and Surpeton, and back to Zamboango May 14 to June 6, 1904.

IX. Par. 2, S. O. # 153, Heady. Dept. Mindanao, July 25, 1904

Arom Special Dervice to Sut. as Durgeon at post of

Bamboanga, Mindanao, P. B.

X. Par. 1, S. O. # 161, Heady. Department Mindanao, Aug. 4, 1908.

Hrom Bamboanga to 1st Div. Hosp., Manila, P. J.

XI. Par. 3, S. O. # 188, Heady. Philippino Division, Sept. 9, 1904.

Hrom 1st Div. Hosp., Manila, P. J. to Soul. Hosp. San Francisco,

California. Sailed an M. O. G. T. Logan.

Is very diese, wie Much Ng. 127. Lo de dullistèreme de promise de Ward Dalmy 1 mgmg_01 to 10:15.

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U. S. Army Cranspo	/ /
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2 Box Hard har 1 Flooris Barres 11 , Pina L'ant fin + ax an extention 1 Traps

MEMORANDUM.

Loads for packing:

- 2 boxes for specimens;
- 1 ammunition;
- 1 traps;
- 1 Cooking outfit and tentage;
- 2 bedding;
- 5 rations.
- 12 cargadores.

Duplicati Data for Dr. Stejneger. March 30,1967. - The Dergeant in charge of the steam launch Spokene, which took Tuegal Wood's party up the river to leamp Wilhelm, Lucina, souther Lugon, showed mette skin of a crocodile which he had shot, 2 months before. The skin had been ent off believed the bead. Thrunken and In as it was when I saw it, and lacking the head, the other measured 17 feet in length in the median, line. When fresh, the replile measured, according to Ah Lengeaut, just 21 feet in tolal length. Unother crocodile, 12 feet in length, had just bern shot in the river.

Bolanical data Chum-ping Chum-ping is the Moro name of the Moro cemetery flower, a succellent littoral plant very abundant and pretty in sandy sail. Dulao is the Moro dye-plant. From the same plant the Moro women can dye hemp red, purple, or yellow. Hruits of 1) olo, Vulu Island: - Papaya, Chico, Mangastine, Lanzoni, Pumelo (grapefruit), Jackfruit (Briedfruit), Durian, Hig, Orange, VLink, Cocoanut, Banana, Custand-opple, ite. The staple vigitables an: Rice, Comoles (yams), Tapioca, Maize, Egghlaut, Gobbi (poer).
The gobbi is called Hō'-free by the Tiruray people in the hills around Colabato, mindanao.

People in the hills around Colabato, Mindanao. May 18, 1904. - The Southing islands in Lake Liguasan Rio Grande Valley, Mindanao, are composed mainly of two ofices of grass; and the cogon grass grows wherever the banks become locally solid. The water cabbage and entangling vines (perhaps a species of the gentian or buck bean Jamily) (specimen taken) Which bear fleshy leaves and white flowers. Locally Eouvolvulus, senna, sedge, and Polygonum are abundant. Denna is the only shrub

OSotanical data. The midle tree (Casuarina) grows on the Tubay River, below the native town of Dantiego. FLORA OF THE PHILIPPINES. HERBARIUM OF THE BUREAU OF SCIENCE. Finers bolteti No. 36936-2 Chee i deritified in Extlerrice. 190 (Spil 29,1904. - The needle tree (Casevarnia) grows Long the middle course of the Baganga River, in astern Mindanao? May 8, 1904. - Agus an River near Lake Linco, Mindanao "Uango" is the name of the Yneca-like tree with slem 36 feet high, with long linear serrate-edged leaves at the top, and large orange-red fruits. In February, 1906, I collected specimens from a tree braring large red pods, on the Faland of Basilan. This true is called Kam-free-my by the moros of Basilan On the Island of Basilan, P. J. Hebruary 16 location comps to. 3 and 4, we ate a delightfully weid fruit of a true with light bank and compound leaves. Fruit the size of a fine and sour lastest leke a ward, mature grose berry. Called &-ba.

Styphelia is the year of Met. Opo. Ericaceae. Diplycosia merrittii Merrill. This was the Jurineipal food of Merula mindovansis on Utt, Halcon. Januar, 17,1907. - Collected a Casuarina, and a fine tree orchid, at Padsan, Flocos norte, Luzon Bold March 25, 1907. — On the edges of the naujan Kwir, Mindoro, a evarse floatnig grass having shoots 40 feet long lined the river shores in many places. Fasse Varian appears to be about the same size as Lake Buluan, Mindanao. It is bordered by lotus, which was the only water lily I raw. The shallows are densely grown with eel-grass (Vallisneria), which has the pestillate flowers lowered by a spiral twisting of the flower clem. Wow many fruiting plants and gathered some which were oftenwards lost. The next of unidentified bird on Rummet of Wount Bliss was placed in a coarse parasitic plant growing on an oak-tree, determined by Dr. Werrill as a species of Nedinilla.
Thedasse movos call the Pumelo-Pa-gat!

Casuarina = needle-tree. Larydum elatumi(Roxb./Wall Tie cedar of ulterlundary Agastus. = al manga Atlantic Union. Phylloclabus . - Malindany Founded by THE LATE SIR WALTER BESANT Annual Report For 1905.

Perth :

COWAN AND CO., LTD., TAY STRF

Statement of Dervice for the year ending June 30, 1906. On duty in the Philippine Islands, feer S. O. # 72, par. 26, Headquarters of the army, dateel Washington, D. C., March 27, 1903, from July 1 to September 15, 1904, as follows: Muly 1 to 24, 1904, on special service at 6,1, dated Heady Dept Trundando, march 22, 1904. Headquarters Dept. of Mindanao, plan 5.0. # and on duty, for the same period, with expedition to Davas and Mount apo, Mindanas, per verbal orders of Department Commander. July 25 to august 8, 1904, on duty as Surgeon post of Zamboanga Mindanav, P. 9 St.O. # 1/5 3, hat. 2, Idaled Heady Deft Mydanas, July 25,19 2. My August 9 to 17, 1904 enroute from 25,19 Lamboanga, Mindanao, to First Division Hospital, Marila, P. J., per Par. 1, S.O. #161, dated Headquarters Department of Mendanav, august 4, 1904. Congust 18 to Deplowber 14, 1904, patient in First Division Hospital, Manila, P.J., Jun. Par. 1, S.O. #161, order above cited. Sufferentin 15to October P October September 15 to October 17.1904, en route to the U.S. a. General Hospital, Presidio of San Francisco, Cali-= Jonia, for treatment, per. S. O. # Par. 3, S. 10. # 188, dated Headquarters Milippine Division September 9, 1904. Nov. 17, 404 to Jan. 17, 1905, on Diek leave of absence per Par. 4, 8.0. # 253, H.D.C. nov. 17, 1904. Jun. 8. S. J. 63, Doied 1, and oft, Ticks 1/2, 1905.

STATEMENT OF ABSENCES FROM ZAMBOANGA, MINDANAO, P.I., OF MAJOR EDGAR A. MEANG, CHIEF SURGEON, DEPARTMENT OF MINDANAO, FROM DECEMBER 27TH. 1905 TO AUGUST 9TH 1906.

Reported at Headquarters Department of Mindanao December 27,1905 and announced as Chief Surgeon, Department of Mindanao and as Attending Surgeon, Headquarters Department of Mindanao, same date.

Absent January 4th to 11th inclusive on tour of inspection, with Department Commander, to Jolo, Siassi, Bongoa, Sibuta, and Tawi-Tawi Islands.

Absent January 20th to 24th inclusive accompanying Department Commander on inspection trip to Davao, Mindanao.

Absent January 26th to February 4th inclusive with map making expedition on Island of Basilan, P.I.

Absent February 13th to 21st inclusive on Island of Basilan, P.I. with surveying party.

Absent March 1st to 3rd inclusive accompanying Brig. General Bliss U.S.Army on tour of observation to Sulu and Basilan Islands.

Absent March 8th at Jolo, P.I. in answer to emergency call for medical assistance from Commanding Officer, Jolo, Jolo on account of numerous casualties resulting from engagement of troops with hostile Moros at Bud-Dajo, P.I.

Absent March 13th to 16th inclusive at Parang, Mindanao inspecting hospital under construction.

Absent March 26th. at Jolo, P.I. as member Board of Officers to report upon the physical condition of Major Ebon F. Wilcox, 4th Cavalry.

Absent May 6th to June 15th inclusive on biological and geographical reconnoissance of Mt. Malindang, Mindanao.

Absent July 8th to 27th inclusive at Manila, P.I. per telegram from Headquarters Philippines Division.

2 co : C : 15 Lo at 7:00 a tilled

July 11-4th Chief Surgeon, D.M.per G.O.41,
Dept.Mind.Dec.27,1905. 5th to 8th en route
to Manila per Telegraphic Authority, Hdqrs
Phil.Div., dated July 5,1906. In Manila July
8th to 27th. En route to Zamboanga July 2830th. July 31st to Oct.12, On duty as Chief
Surgeon, D.M., per G.O.41, D.M., Dec.27, 1905.
On Special duty Hdqrs Philippines Division,
Oct.23,1906 to April 15,1907, per.par.3, S.O.238,
Phil.Div., dated Oct.23,1906. Opernanding Military
Hospital, Camp John Hay, Benguet April 16th to May
18,07, per par.10, S.O.74, Phil.Div., April 13,07.
On detached service in the field May 19th to June
28,1907, per V.O. Commanding Gen'l, Phil.Div. 29th to
30th Commanding Mil.Hosp.Camp John Hay.

Record of personal war. Seck leave from Gent, Hosp. S. 7. Jun. 8.0. 4 253, D. C.A. Two. 17, 1904 Ordinary leave for S. O. 4 307, Was Deft., Dec. 31\$, 1904.
Extended by S. O. 427, W.D., Hebr. 2, 1905.
Seick leave for D. G. 463, W. D., March 18, 1905.

Sit.

Zambaonag, Mindanao, special service, par 2, S. O. 61, D. M., dated Mch 22,1904. Surgeon Zambaonga, Mindanao, per par. 2, S. 0.153, D. M., dated July 25,1904. Reported same date. Sick in Qrs July 25-31,04. Will proceed to Manila for obs. and treatment, per par. 1, S. O. 161, D. M., dated Aug. 4, 1904. Left Zamboanga Aug. 9, and reported at Division Hospital Aug. 17, 1904. Transferred to General Hosp. San Francisco, Cal. for treatment, per par. 3, S. 0.188, P.D., dated Sept. 9, 1904. Left Manila Sept. 15, 1904. Returned to Manila from the United States on the U.S.A.T., Logan July 26,1905, Assigned to the Dept. of Luzon, per par. 9, S. 0.173, P. D., July 28, 1905. Camp Gregg, Pang. per par. , S.O.160, D.L., ####1905. Joined July 29, Left Camp Gregg, en route to Manila July 30, 1905. Assigned to duty as Chief Surgeon Dept. of Luzon, per ## G.O. 52, DL. July ##, 1905. Joined July 31,1905. Relieved from duty as Gh. Surg. and assigned as assistant to C.S., D.L., per 9.0.68, D.L., Oct.9, 1905, joined samae date: Relieved from duty in the Dept. of Luzon and assigned to duty in the Dpt of Mindanao, per par. 10, S.O. 280, P.D., dated Dec. 11, 1905. Left Manila en route to Baguio, Benguet Nov. 27, 05, per par. 2, S. 0. 252, D. L., dated Nov. 25, 1905. Returned to Manila December 16,1905. Left Manila en route to Zamboanga Dec. 19,1905. Arrived Zambaonga December 27,1905. Assigned to duty as Chief Surgeon, Dept. of Mindanao, per G.O.41, D.M., dated December 27,1905, assumed the duties Dec. 28,1905. Left Zamboanga Jan. 4,06 om tour insp. to Jolo, Siassi, Sibutu, and Tawi-Tawi, per. V.O., C.G., D.M., Jan. 3,1906. Returned to Zamboango Jan. 11,1906. On detached service accompanying Map making exp. to the isld of Basalin, Jan. 26-Feb.4,06, per V.O.Dept.Comd'r, Jan. 25, 1906. On tour of insp. to Parang March 13-16-06, per V.O., D.C., March 12, 1906. On det. service May 6, to May 1906, per 1st. Ind. Hdqrs Dept. Mind. dated April 16, 1906. In Manila July 8-27, per Tel.auth. Hdqrs Phil. Div.dated July 5, 1906.

Ordered to Camp John Hay by S. O. # 74, par. 10, H. P. D., april 13, 1907.

Jane - Good Tares three So Lundie Co. To A. at, I when Buch Estion of Journey.

On duty as Post Surgeon, Jague Camp John Hay, Bengeret Province Luzon, July 1 to august 6, 1907 July Par. 10, S. O. No. 74, H. D. D., Opril 13,1908. Kelieved from diely in M. Phelippines Division, to leave on transfort (USay Sherman) sailing from Manila for Dan Francisco, August 15,190 T, fier S.O. 41 123 War Department, Washington, May 25, 1907. Left Camp John Hay August 7, 1907; arrived at Jan Francisco Seplember 16, 1907; reported for duty at Fort Tollen, hew York September 26, 1907, per order last ceted. On duty as Surgeon, Fort Lotter, New Yorks for order last cited, September 27, 1807; detached service (riding lest) 27, 1907; detached service (riding lest) Oct. 20 to 24, 1907; on duty as dungen to strong stro

S.O. # 123, W.D., Man 25,1907; on leave of absence november 7 and 8, 1907, July S. O. # 177, Nort Tollen new York, november 6, 1907; on dety as Durgeon, Fort Lotten, new York, 9 to December 8, S.O. #123, W. S., per. par. 21, S.O. #123 May 25, 1907; on leave December 9 to 12, 1908, p on leave of obsence No. 194, Fort Tollen, new York, 2 ecember 5, 1907. ; and duty as Aurgeon, Fort Totten new York Degember 12, 1907 to Jame 30, 1908, Day 25, 190; Hay 25, 190; hu. D.O. # 123, HW. (1). Authorized November 5, 1896.

Col. Cample.
Major La Large

1 Jno. M. Bannister

Constituted B. of. R. for

Case of Courter

Libron

Johnston

Dr. Milliam Augustus Dotunes

Chirty-schon Mest Sebenty-first Street

STATEROOM No. //
BERTH UPPER LOWER SETTEE
Seat No. //

VOTE FOR Senate Constitutional Amendment

to exempt from taxation the

California Academy of Sciences

a free educational institution a free museum for the people

Casoid'



FREE FROM STARCH & SUGAR.

Equal in Nourishment to Six times their weight of Ordinary Bread.

THREE VARIETIES.

No. I. (Plain).—Suitable for use instead of bread at all meals. Excellent with cheese. They keep in good condition indefinitely if stored in a cool place.

No. 2.—Plain Crackers for general use instead of bread. Very nutritious. Should be stored in a cool place.

No. 3.—Sweetened with Saccharine. For use with coffee or tea. Crisp and appetizing.

Price: \$1.50 per box.

Or 6 boxes (assorted if desired) for \$8.00. CARRIAGE PAID.

HUNT, BAHNARD & CO., BLANDFORD ST., W.

'CASOID' DIABETIC FOODS.

The only STARCHLESS Foods in the World.

MANUFACTURED

BY

GALLARD, STEWART & WATT,

74, REGENT STREET,

LONDON. ENGLAND.

Also TORONTO, MELBOURNE, & VIENNA.

GENERAL AGENTS FOR THE UNITED STATES:

THOS. LEEMING & CO.,

73, WARREN STREET, NEW YORK CITY.

Casoid Dinner Rolls.

These Rolls are made from vegetable albuminoids. They contain not more than 4% of starch, and this small proportion can be safely ignored. They can be used instead of bread and toast at all meals, and are improved by toasting. When grated the crumbs can be used for frying entlets or fish. They keep indefinitely whilst the tin remains unopened. Price \$1.50 per box; 6 boxes for \$8.

"Casoid" Sugarless Marmalade.

Free from Starch and Sugar.

This Preserve is absolutely free from sugar and starch. An admirable substitute for ordinary Orange Marmalade. Patients appreciate it as a luxury. Unopened jars keep six months.

Prico 75 cents per jar.

" Casoid " Sugarless Chocolate.

In small tablets, slightly sweetened, consisting of pure concentrated Chocolate. Its flavour is very strong. One tablet dissolved in hot water makes a cup of excellent chocolate beverage.

Boxes containing 36 tablets, per box \$1.00.

Saccharin Pellets.

For sweetening, as a harmless substitute for sugar 500 pellets in bottle, \$1.00.

Kalari Biscuits.

(Crackers.) FOR WEIGHT REDUCTION. Free from drugs. \$1.00 por box.

"Casoid" Diabetic Foods

Will be sont by express, propaid on receipt of the price.

Sole Agents for the United States-

THOS. LEEMING & Co., 73, WARREN STREET, NEW YORK.

CASOID

STARCHLESS FOODS

FOR

DIABETES.

MANUFACTURED BY

Callard, Stewart & Watt,

Food Specialists, 74, Regent Street, London, England.

Agents for the United States:

LEEMING & CO. THOS. 73, Warren St., New York City.

DIABETES.

The disease known as Diabetes is a condition in which the body is unable to use up starchy and sugary foods. If a diabetic patient takes starch and sugar in any form, it is not used up by the body, but remains unassimilated, and passes into the blood; its presence there causes all the well-known symptoms; it eventually passes into the urine. The only successful treatment of diabetes consists in depriving the patient of the foods containing starch and sugar, and thus allowing no accumulation of these substances in the blood. Some patients only partially loose their assimilative power, and these cases can be allowed limited quantities of starch and sugar, as may seem best to the physician. It is unwise for patients to relax the restrictions of the diet unless they receive special instructions from their medical adviser. Diabetic diet merely consists in the avoidance of starchy and sugary foods, and replacing them with starchless foods, such as Casoid Flour and Casoid Biscuits.

The principal article to avoid is ordinary bread.

The following are the common articles of food which must be avoided:—

SUGAR. BREAD. ROLLS. TOAST. CRACKERS.

CEREAL FOODS. RICE. MACARONI.

POTATOES. BEETROOT. PEAS. BEANS.

PASTRY. PUDDINGS. BANANAS. GREEN CORN.

CASOID FOODS CONTAIN NO DRUGS.

"CASOID" FLOUR.

For making Diabetic Bread.

This preparation consists only of albumen, and is therefore very highly nutritious. It does not contain starch, sugar, or dextrine in any form, this being the essential condition of any food which is fit for the use of diabetic patients. Full directions for its use are supplied with each package. Bread, etc., made from it is equal in nourishment to six times its weight of ordinary bread. It is not quite as palatable as the articles made with ordinary wheat flour, but a preference for this food is soon acquired by patients.

The haking powder used with it should be starchless, but if this is not available, one of the ordinary baking powders can be used.

In 2-lb. bags, Price \$1.50, carriage paid.

Particulars of Casoid Biscuits on next page.

OBESITY.

The CASOID FOODS are largely prescribed by physicians for the treatment of this uncomfortable condition, and the results are found to be excellent. If ordinary starchy foods, such as bread, rolls, crackers, biscuits, rice, potatoes, and sweet foods be avoided, and Casoid Biscuits taken to replace them at all meals, weight reduces at the rate of 2 lbs. per week after the first week. In cases of extreme stoutness about 3 or 4 lbs. per week is lost. This steady reduction is effected without impairing the strength or causing inconvenience. The biscuits cannot be harmful in any way.

CASOID FOODS CONTAIN NO DRUGS.

CASOID FLOUR.

This Flour consists of a mixture of vegetable and milk albuminoids, and is free from starch and sugar. It is useful for making bread, cakes, biscuits, pastry, etc., at home. Full directions are on each package, and it keeps in good condition indefinitely if stored in a dry place. It is highly nitrogenous, and therefore affords concentrated nutriment.

2-lb. packages. Price \$1.50.

KALARI BATONS

Kalari Batons are free from starch and sugar. They are made from milk albuminoids; very crisp and light. Being plain they are suitable for use with or without butter at all meals instead of bread and toast. They should be stored in a cool, dry place.

Price \$1.50 per box; 6 boxes for \$8.

Casoid Foods are free from Starch & Sugar

CASOID BISCUITS

THREE VARIETIES.

No. 1 CASOID BISCUITS (Plain Crackers).

These Biscuits being quite plain are suitable for use instead of bread at all meals. They are excellent with cheese, and can be toasted with advantage. They keep in good condition indefinitely if stored in a cool place.

\$1.50 per box; 6 boxes for \$8.

No. 2 CASOID BISCUITS (Plain Crackers).

These Biscuits are suitable for use instead of bread at all meals, but their flavour is different from that of No. r Casoid Biscuits.

\$1.50 per box; 6 boxes for \$8.

No. 3 CASOID BISCUITS (Sweetened).

These Biscuits are suitable for use with tea or coffee. They are sweetened with saccharin. Crisp and palatable.

\$1.50 per box; 6 boxes for \$8.

Casold Foods are free from Starch & Sugar

THIS PAMPHLET IS SENT ,TO QUALIFIED PHYSICIANS ONLY.

Warning.

The so-called "Gluten" foods which are sold as "diabetic" should always be tested before sanctioning their use. These preparations contain a large proportion of starch and other carbohydrates, which render them useless for diabetics. If any food shows a blueblack colour with aqueous solution of iodine, it contains starch and is fraudulent.

GASOID FOODS.

Starchless and Sugarless.

General Agents for the United States-

THOS. LEEMING & CO., Importers,

73, WARREN STREET,
NEW YORK CITY.

FOR PHYSICIANS ONLY.

The Few

Definite.

Facts...

About...

Diabetes

And its.

Rational

Treatment.

Published by

CALLARD & CO.,

74, Regent Street, London, England.

DIABETES MELLITUS

is one of the pathogenic conditions the treatment of which is often very unsatisfactory to the general practising physician. The fact that no actual curative treatment has yet been given to the world is disconraging, and the lack of improvement in the patient's condition causes despair and loss of faith in any measures adopted.

The strict dietetic measures, which are so irksome to the patient, are often disappointing, this circumstance being largely due to the lack of care and thoroughness in making that restricted diet bearable to the patient. It is practically impossible for a busy physician to give such details the care and attention they require, and he has had to rely upon the patient's own ingenuity and self-abnegation, which in most cases amounts to very little.

THE ONE CERTAIN FACT

that stands out in the investigation of carbohydrate metabolism and the pathology of diabetes mellitus is, that the patient loses partially or wholly the power of assimilating carbohydrates, and that the unassimilated material passes into the blood and eventually into the urine. The presence of this carbohydrate matter in the blood causes the familiar symptoms which are so distressing.

It often happens that a patient having sugar in the urine is ordered a starchless diet, and the physician, seeing the patient again in a few days, judges his condition as the result of a starchless diet. In many cases this is contirely misleading, as many circumstances may have occurred to upset the calculations. The patient may not have been faithful to the directions, he may have been taking so-called

"gluten" food, he may have lost his assimilative power entirely, or he may have only partially lost it.

There is abundant CLINICAL EVIDENCE to prove that diabetes mellitus can be controlled and kept down, in a patient over 30 years of age, if the diet contains no more than the amount of carbohydrates (starch, sugar and dextrine) which he can assimilate.

THE TOLERATION POINT

can be easily ascertained in the following way. The patient should be instructed to diet according to the diet list on page 7 (separate lists can be had on application), for at least 2 weeks, using Casoid preparations to replace bread and cereals. His nrine should then be quantitatively examined and the result noted. For the next two weeks he should continue the same diet, but with an allowance of 1½ ozs. of ordinary bread per diem, after which another quantitative examination of the urine must be made. If the sugar secretion has not increased, another two weeks' trial with 3 ozs. of ordinary bread per diem can be tried and so on until the toleration-point is ascertained.

A PATIENT'S ALLOWANCE

of starchy food should be kept within the toleration limit, and if the intelligent co-operation of the patient is obtained, results will be satisfactory. The toleration-point should be ascertained again in a few months, as the assimilative power seldom remains stationary and frequently increases. Sudden Loss of Weight with no sugar secretion often denotes the increase of assimilative power.

THE DIET PROBLEM

immediately presents itself, and it is the object of this pamphlet to show the physician how he can be reasonably sure of getting correct results. The sudden cutting off of some staple articles of diet often leaves the patient in a quandary, and he either starves or breaks through his restrictions, thus vitiating the calculations of his physician.

CALLARD & Co., publish a Diabetic Cookery Book, which contains an explanation of the disease suitable for the layman, and giving directions for the proper observance of a starchless diet, with 150 recipes of all kinds. The patient's requirements are explained, practical help given, and there can be no excuse for starving or disregarding directions.

An excellent substitute for bread and cereals is provided by Callard's "Casoid" preparations (flour and biscuits), which are palatable and highly nutritious, particulars of which are given on page 6. These foods are composed of milk and vegetable albumen only, and are absolutely free from carbohydrates of any kind. They are prepared with great care and are necessarily more expensive than ordinary foods.

CASOID FOODS CONTAIN NO DRUGS.

A GUIDE

то

Diabetic Cookery

By F. James, M.P.S. (Great Britain).

A COPY WILL BE SENT FREE TO PHYSICIANS.

Price to Patients •• cents.

"CASOID"

FLOUR.

For Making Diabetic Bread.

This preparation consists only of albumen, and is therefore very highly nutritious. It does not contain starch, sugar, or destrine in any form, this being the essential condition of any food which is fit for the use of diabetic patients. Full directions for its use are supplied with each package. Bread, etc., made from it is equal in nourishment to six times its weight in ordinary bread. It is not quite as palatable as the articles made with ordinary wheat flour, but a preference for this food is soon acquired by patients.

The baking powder used with it should be starchless, but if this is not available, one of the ordinary baking powders can be used.

In 2-1b, bags Price \$1.50,

Particulars of Casoid Biscuits on next page.

Analysis of Casoid Flour.

Water	 	10.80%.
Fat	 	1.40%
Mineral Matter	 	2.50%.
Proteids	 	84.56%.
Cellular Fibre, etc.	 	0.74%

100.00%

'Casoid'

Biscuits.

FREE FROM STARCII & SUGAR.

— CRISP & PALATABLE. —

Equal in Nourishment to Six times their weight of Ordinary Bread.

THREE VARIETIES.

- No. 1. (Plain).—Suitable for use instead of bread at all meals. Excellent with cheese. They keep in good condition indefinitely if stored in a cool place.
- **No. 2.**—Plain Crackers for general use instead of bread. Very nutritious. Should be stored in a cool place.
- **No. 3.**—Sweetened with Saccharine. For use with coffee or tea. Crisp and appetising.

Price: \$1.50 per box.

Or 6 boxes (assorted if desired) for \$8.00 CARRIAGE PAID.

These foods are practically free from carbo-hydrates and may be taken in any quantity.

Butcher's Meat of all kinds.
Ham, Bacon, or other smoked, salted, dried, or cured meats.

Poultry. Game.

Shell-fish, and Fish of all kinds, fresh, salted or cured.

Animal Soups not thickened, Beef-tea and Broths.

Eggs dressed in any way.

Cheese. Cream Cheese.

Butter. Cream.
Greens. Spinach. Turnip-tops. Turnips.
French Beaus. Brussels Sprouts. Cauliflower.
Broccoli. Cabbage. Asparagus. Seakale.
Vegetable Marrow. Mushrooms. Watereress.
Mustard and Cress. Cicumber. Tomato. Lettuce.
Endive. Radishes. Celery. Rhubarb. Vinegar.

Oil. Pickles.

Jellies and Custard sweetened with Saccharine.

Blanc-mange made with Isinglass or Gelatine and Cream.
Nuts of any description, except Chestnuts.
Olives.

The following articles of food contain large proportions of either starch, sugar, or dextrine, and should be avoided by diabetics.

Sugar in any form.

Wheaten Bread and Biscuits of all kinds.
Toast. Crackers.

Rice. Arrowroot, Cornflour. Oatmeal. Sago, Tapioca, Macaroni. Vermicelli.

Potatoes. Carrots. Parsnips. Beetroot, Peas.
Spanish Onions. Green Corn.
Pastry and Puddings of all kinds.

Fruits of all kinds (Lemons excepted), fresh & preserved.
Sauces and Gravies thickened with Flour.



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(TRADE, MARK)

"The sweetest thing on earth"

'Saxin' provides the maximum of sweetness in the minimum of space. A small bottle con-

taining 100 or 200, each of which corresponds in sweetening power to one lump of loaf sugar, can be carried comfortably in the waistcoat pocket or in a lady's purse. When sugar is forbidden 'SAXIN' is essential. It is perfectly harmless, even for those who suffer from obesity, diabetes, gout or rheumatism, and who must not take sugar. 'Saxin' simply imparts its delicious sweetness to the food or fluid with which it is

Bottle of 100 slightly reduced Actual height, 11 in

The white triangle =5 cwt. Sugar The dark apex r lb. 'Saxin' = 5 cwt. Sugar used. It is free from the metallic tang which makes artificial sweetening agents so objectionable. 'SAXIN' is a dainty, delicate sweetener, so portable as to be always at hand even when travelling or visiting. You simply use one instead of a lump of sugar. For touring, travelling, or picnicking it is ideal.

'SAXIN,' gr. 1/4, is supplied by all Chemists in bottles of 100, 200 and 500

TRADE 'TABLOID' BRAND TEA

'TABLOID' TEA is all tea, but not all of the tea leaf. It contains nothing but pure tea of fine quality, from which the useless portions of the leaf, such as the stem and midrib, have been 'Tabloid' removed. Therefore it goes further than teas of ordinary Tea commerce, and produces a finer and more delicious beverage. is all tea By compression into a small space, not only is such compactness attained that tea sufficient for producing 50 to 100 cups can be carried comfortably in the pocket, but other still more important advantages are secured. It is well known, for instance, that Retains its freshness and tea loses its fine aroma and deteriorates in strength and in aroma quality by contact with the air. In the case of ordinary tea, each tiny leaf, even when kept in the caddy, is surrounded by and in contact with a layer of air. In 'TABLOID' TEA the surface presented to the air is infinitely less, and by the careful method of packing even this surface is adequately protected from deteriorating influences.

THE ART OF TEA-MAKING

To yield a perfect beverage, the tea must not only be of fine quality and in perfect condition, but it must be freshly made. Here, again, 'Tabloid' Tea conforms to the ideal. From it, "the cup that cheers" is prepared quickly and without loss. Place one or more, according to taste, in a warmed cup. Pour on, The perfect whilst still boiling, fresh water, which has been allowed to boil furiously but not long; stir, and allow to infuse for three to five minutes. Then add milk or cream, 'Saxin' or sugar, to suit individual tastes.

.4

If preferred, the beverage may be served in the tcapot by proceeding as follows:—Place sufficient 'Tabloid' Tea in a warm jug. Pour on the boiling water, cover and allow to stand from three to five minutes, and then strain off into a warm teapot. By these means the full value of the theire, which is the "soul" of the tea, and acts as a bracing stimulant to the

nerves, is obtained, and the unwholesome tannin, which would be extracted by allowing the leaves to stew in the teapot, is left behind.

Either method produces a beverage possessing exceptional delicacy and aroma, and far superior to that obtainable from ordinary tea.

'Tabloid' Tea, in addition to its superiority for ordinary regular use, is the most suitable for the early morning cup, for afternoon



Box of 100 'Tabloid' Tea One-half actual size

tea, or for travellers, sportsmen, eyelists, motorists, and for pienic parties. It is supplied in handsome metal pocket-cases containing 100 and 200.

'TABLOID' Brand TEA. Special Blend

A unique blend of the very choicest varieties, highly approved by connoisseurs, is also supplied in tins of 100 and 200.

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