dyestuffs and chemicals, the Federal Trade Commission has issued complaints against 22 concerns. In ten cases the commission has issued a report, dismissing one complaint—that against the Commonwealth Color & Chemical Company, of New York—and issuing orders to “cease and desist” from commercial bribery against the other nine concerns whose cases have been tried. The concerns named in complaints issued by the Federal Trade Commission are F. E. Atteaux & Company; Dearborn Chemical Company; The Commonwealth Color and Chemical Company, and Herbert L. Wittnebel, a salesman of that concern; the Federal Color & Chemical Co.; William Mohrmann; John Campbell & Co.; Holliday-Kemp Co., Inc.; A. Klipstein & Company; Geigy Company, Inc.; C. Bischoff & Company, Inc.; The Heller & Merz Company; The Franklin Import & Export Company, Inc.; New York Color & Chemical Company; Louis Rosenthal, doing business under the name and style of the United Chemical & Color Company; Andreykovicz & Dunk, Inc.; Arkansas Distributing Company; Pennsylvania Salt Manufacturing Co.; L. Richardson, H. Smith Richardson and L. Richardson, Jr., co-partners, doing business under the name of The Vick Chemical Company; The Arabol Manufacturing Co.; Bosson & Lane; and Ricco Company, Inc.

All of the concerns named in the complaints issued by the Commission are accused of giving gratuities “consisting of cigars, meals, drinks, entertainment and in some instances small presents,” while several of them are also accused of giving and offering to give to employees of both customers and prospective customers and competitor's customers “sums of money.” With the commercial bribery in mind, with which the dyestuff and chemical business in this country was infested prior to the war, it is not surprising that a number of dealers are yet to be found who cling to the methods which in the past have been so effective as one of the means used to prevent the development of a real dye industry here. It is interesting to note, however, that none of the larger American manufacturers of dyestuffs or chemicals have been included among those against whom complaints have been issued by the Commission.

Concerns against which the Commission found its complaint to be justified and issued orders to cease and desist include F. E. Atteaux & Co., Inc.; Federal Color & Chemical Company; William Mohrmann; John Campbell & Company; Holliday-Kemp Company, Inc.; A. Klipstein & Company; Geigy Company, Inc.; C. Bischoff & Co., Inc.; and The Arabol Manufacturing Company.

While the Senate has been debating the Treaty, after having taken it up once more for consideration, the House has latterly been engaged in consideration of the army reorganization measure. As did the new army bill reported by the Senate military committee, the House bill provides for a separate Chemical Warfare Service. Prominent members of the House, however, consider the bill defective in that it does not define the duties of the Chemical Warfare Service, and therefore the General Staff, which has openly opposed a separate Chemical Warfare Service, would be enabled practically to kill the Service if it so desired. Representative Dent has announced that he will seek to guard this point in the legislation. The action of the House committee in making this Service a separate department of the Army was early forecast. There seems little doubt but that the House will sustain the committee and that when the army reorganization is finally worked out the importance of chemistry, not only in peace, but in warfare also, will have been recognized by both House and Senate, and the Chemical Warfare Service set up as a separate and distinct department of the Army. Any other action would be surprising to those in charge of the measures in both bodies.

It is interesting to note in this connection that Major General William L. Sibert, who had been chief of the Chemical Warfare Section of the Army, has been replaced by Lt.-Col. Amos Fries. Colonel Fries was put in charge of the Chemical Warfare Service of the American Expeditionary Forces and served in that capacity in Europe until the end of hostilities. Upon his return to this country he resumed his former rank and was recently put in charge of the Service in this country.

Dr. S. W. Stratton, chief of the Bureau of Standards of the Department of Commerce, appeared before the Senate Appropriations committee recently and urged that the Senate reverse the action of the House in reducing the appropriations asked for by the Bureau to carry out its important work. Like many other departments and bureaus, the Bureau of Standards was struck by the program of economy determined upon by the Republicans in Congress, and its appropriations for the ensuing year were cut even below the sums granted in the last appropriation bill for the current year. The importance of the work of the Bureau was emphasized to the committee by Dr. Stratton, who asked that the Senate at least restore the appropriation to the amount granted this year.

March 15, 1920

OBITUARIES

FRANCIS C. PHILLIPS

Dr. Francis Clifford Phillips died at his residence, 144 Ridge Ave., Ben Avon, Pa., on Monday, February 16, 1920, of influenza-pneumonia, passing away in the same peaceful manner which characterized his life.

He was born in Philadelphia, April 2, 1850, the son of William S. and Fredericka Ingersoll Phillips. He received his early education at home from an unusually capable and devoted mother. In 1864 Dr. Phillips studied at the Academy of the Protestant Episcopal Church in Philadelphia, and in 1866 entered the University of Pennsylvania, where he obtained his A.B. From 1871-1873 he studied under Regimus Fresenius at Wiesbaden, Germany. During the latter year he was private assistant to Prof. Fresenius. He then spent a year at the Polytechnic School at Aachen (Aix-la-Chapelle). Here he was associated with Prof. Landolt. Professor Phillips was unable to complete his studies abroad because of the poor health of his father. He returned to America, and during the following year became instructor in chemistry at Delaware College. In 1875 he was appointed to the teaching staff of the University of Pittsburgh, then the Western University of Pennsylvania,

FRANCIS C. PHILLIPS

where he taught for forty years, retiring as head of the department in 1915. For many years he taught chemistry, geology, and mineralogy. In 1878-1879 he also lectured to the students in the Pittsburgh College of Pharmacy. In 1879 he received the degree of A.M. from the University of Pennsylvania, and in 1893 the Ph.D. from the same institution. In June 1919 Dr. Phillips received the honorary degree of Doctor of Science from the University of Pittsburgh.

He was married in 1881 to Sarah Ormsby Phillips, daughter of Ormsby Phillips, a former mayor of Allegheny.

In 1915 Dr. Phillips retired from active service in the University of Pittsburgh under the pension system of the Carnegie Foundation. On this occasion his colleagues and the alumni tendered him a banquet at which he was presented with a check for one thousand dollars for a little vacation with “Mother” Phillips. Professor Phillips was so solicitous of the safety of his dear wife, that though they intended visiting the Bermudas and the Panama Canal Zone, the war, with the possible accompanying danger in ocean travel, caused him to postpone the trip which was never realized. At the banquet, the fruit of his labors as a teacher was in plentiful evidence, including such men of prominence as George H. Clapp, J. M. Camp, Walther Riddle, C. M. Johnson, Charles Kellar, Charles Dinkey, W. A. Hamor, Jacob Rosenbloom, the late Robert Carnahan and many others. It was an evening of tribute to one who had so conscientiously given to former students all that he possessed as a teacher.

Since 1915 he had been engaged continuously in research and writing in a laboratory provided by the Mellon Institute.

During the recent war he conducted researches on gases in cooperation with the Gas Warfare Service.

Dr. Phillips was an authority on natural gas, in which field he held international recognition. In 1904 he published the "Methods of Analysis of Ores, Pig Iron and Steel Used by the Chemists in the Pittsburgh Region," and in 1913 a "Textbook of Chemical German," of which a second edition appeared in 1916. At the time of his death Dr. Phillips had two other books well under way, one on the "Life and Work of Joseph Priestley," the other on "Qualitative Gas Reactions."

Dr. Phillips was a member of the following societies:

Phi Kappa Sigma Fraternity since 1867.
Engineers' Society of Western Pennsylvania since 1880.
American Association for Advancement of Science since 1887.
American Institute of Mining Engineers since 1892.
American Chemical Society since 1894.
American Philosophical Society since 1894.
Phi Lambda Upsilon Fraternity since 1919.

Dr. Phillips was a member of the Chemists' Club of New York City and the University Club of Pittsburgh. He had been a member of the Council of the American Chemical Society since the organization of the Pittsburgh Section in 1903.

As the Rev. Henry H. Forsythe so aptly said at the funeral service, Professor Phillips' life was characterized by many great virtues. Though recognized throughout the world for his researches on gases, he was simple and plain as a child and never refused another his counsel on any matter. He possessed a modesty rarely seen in men and walked always in a humble spirit. He loved and bore the love of his many pupils, who though they might have had a difference in the classroom invariably learned to love the dear professor. He was the gentlest and kindest of men. As in his scientific researches he realized that the strictest observance of truth and honesty was necessary for the accurate solution of nature's secrets, so in life he walked uprightly and knew not of untruth or subterfuge.

Beside his widow, Mrs. Sarah Ormsby Phillips, Dr. Phillips leaves two sons, Clifford S. and Frederick I. Phillips.

ALEXANDER SILVERMAN

DAVID SHEPARD PRATT

The sudden death of Dr. David Shepard Pratt, on January 28, 1920, was a distressful misfortune to the world of science. While his published researches in the field of organic chemistry had been looked upon as achievements and had accordingly directed attention to his rare ability as an investigator, yet some of his most important accomplishments—some of those which had resulted from his contact with industry—were still awaiting preparation for publication at his hands, and at the time he succumbed to pneumonia he had just finished the development of several processes of undoubted value to agriculture. His end was very premature, and it is with an acute sense of bereavement that this occasion is taken to pay a brief word of tribute to so esteemed and efficient an associate.

David Shepard Pratt, son of Charles Manville and Louise Hale (Woodford) Pratt, was born at Towanda, Pa., on September 20, 1885. He was graduated at Cornell University with the degree of A.B. in 1908, and remained there as a Fellow in Chemistry until 1911, when he received the degree of Ph.D. He then joined the staff of the Bureau of Chemistry in Washington, D. C., as assistant chemist, but remained there only a short time, being soon selected as Chief of the Organic Division of the Bureau of Science in Manila, P. I. His chemico-economic studies in the Philippines were varied and valued, and he also acted as a member of the Pure Food and Drug Board. In 1914 he returned to the States to accept a professorship of chemistry at the University of Pittsburgh, and he successfully occupied that chair and the headship of the organic department of the School of Chemistry for three years—until he was made an Assistant Director of

the Mellon Institute of Industrial Research. On January 1, 1920, after three years' service, he resigned at the Institute and was arranging to enter consulting chemical practice in St. Louis, Mo., at the time of his fatal illness.

From his student days at Ithaca, Pratt's studies in organic chemistry were characterized on the one hand by philosophical breadth of view, and on the other hand by extreme accuracy of statement. It was to the combination of these characteristics with highly skillful experimentation that the value of his research work was due. The combination is seen prefigured in his reports of researches on various problems in the domain of tropical chemistry; it is noted as realized in his published investigations on phthalic acid derivatives; but it became most effective at the Mellon Institute, where Pratt enjoyed broad opportunities to apply, in the inquiries of the Industrial Fellowships under his supervision, his profound knowledge of organic chemistry and his familiarity with research methods. His scientific spirit, his keen critical insight, and his exhaustive control of sources of information gained and held the high respect of all and played a prominent part in establishing the success of the system in operation at the Institute. To the members of the Institute the tidings of his death came with a deep sense of loss, for, in addition to being an efficient research executive, he was a lovable man.

W. A. HAMOR

LEONARD MERRITT LIDDLE

The untimely death, on February 21, of Dr. Leonard Merritt Liddle, a Senior Industrial Fellow of the Mellon Institute of Industrial Research, was an irreparable loss not only to the friends whose privilege it had been to know so scholarly and amiable a man, but to the interests of the chemical profession in general. To some, perhaps, it may seem to be extravagance to refer to the irreparability of any such loss to chemistry; for in the great work of the world we are inured to see the ranks close up as heroes fall by the way, and when we come to calculate the sum of actual accomplishment, in our gratitude over the estimable results obtained we rarely perceive the importance of those innumerable unrealized possibilities upon which, in the nature of things, we can place no just evaluation. It is inevitable that this should be so. There is, however, a viewpoint from which it may be reasonably insisted that the work which rare and original minds fall short of achieving because of brevity of life does never actually get done at all. No doubt similar work is carried out; but the performance of it is in an entirely different order of causation; and while there may be a resemblance of equivalence, the fact is evident that, from the sum of human effort, an indefinite amount of rich and fruitful life has been lost. True as this is in the case of pure science, it is still more obviously true in applied science or in industrial research. This becomes clear when we consider that the work of a keen, skillful scientific investigator is artistic, the peculiar product of endless complexities of individual characteristics—personal poise, mental tone, and method of thought.

In the case of Leonard Merritt Liddle, none except the friends who knew the treasures of his highly trained, acute mind, as revealed in intimate association and in familiar conversation, are likely to realize how great is the loss which chemistry has sustained in his death. His end was very premature indeed, and it is with a deep sense of bereavement that this occasion is taken to pay a brief word of tribute to him.

Leonard Merritt Liddle, son of Stockwell and Belle Watts Liddle, was born at Mt. Vernon, Iowa, on September 11, 1885. He received his preparatory education at Cornell College Academy and was graduated in 1902. He then entered Cornell College, from which institution he received the degree of B.S. in 1906. It was while a student at Cornell that he became