

DAVID A. WELLS. David Ames Wells, the well-known political economist, died at his home in Norwich, Conn., November 5, 1898. He had been ill for some time, and his death had been expected for the last two weeks.

Mr. Wells was born in Springfield, Mass., on June 17, 1828. He was a descendant on his father's side of Thomas Welles, one of the first governors of Connecticut, and on his mother's side of David Ames, who directed the construction of the United States armory at Springfield, from which stock comes also the well-known manufacturing and railroad-building family of Massachusetts. In 1847 Mr. Wells was graduated from Williams college, and at once proceeded to repay his obligations to his Alma Mater by joining in the preparation of a work entitled "History and Sketches of Williams College," which was published the same year at Springfield. In 1848 he was employed on the editorial staff of the Springfield Republican, and while thus engaged gave the first conspicuous proof of the practical bent of his mind by suggesting and participating in the invention of a machine for folding newspapers and booksheets in connection with the power printing press. The first machine ever successfully constructed and operated was made at his expense and worked under his direction in the office of the Springfield Republican.

The sale of his interest in this invention put him in position to continue his studies, and leaving journalism he entered the Lawrence Scientific school at Harvard college, where he became a special pupil of Agassiz, and was graduated in 1852, with the first class that completed the course in that school. He remained at Harvard as assistant professor, and was also lecturer on physics and chemistry at the Lawrence academy in Groton, Mass. While in Cambridge in 1849 he began with George Bliss (since a well-known lawyer in New York) the publication of the Annual of Scientific Discovery, which he continued until 1866. In 1866 he invented an improved process for the preparation of textile fabrics. During the years 1857-8 he was a member of the New York publishing firm of G. P. Putnam & Co., and during this period brought out a number of scientific text-books, which were extensively circulated. His "Science of Common Things" will be remembered by many persons now of middle age as containing just those facts in natural science a knowledge of which is indispensable in ordinary life, but which knowledge children do not know how to obtain. Other works in this series were upon natural philosophy, chemistry, and geology; two of which enjoyed the distinction of being translated into Chinese, while that upon chemistry was adopted

as the text-book in the United States Military academy.

The excellent reputation obtained by Mr. Wells as a scientific writer was very soon dimmed by the brilliancy of his achievements in another field. While residing at Troy, N. Y., in 1864, he read before a literary club there an essay which was immediately published under the title "Our Burden and Our Strength." It was reprinted by the Loyal Publication society of New York, republished also in England, translated into French and German, and had a sale estimated at 200,000 copies. At that time the enormous increase of our debt and the inadequacy of our complicated and oppressive system of taxation to produce a sufficient revenue alarmed the nation and impaired the credit of the government. This essay is generally believed to have had a most powerful influence in restoring public confidence and improving our financial position. Upon reading it President Lincoln formed such an opinion of Mr. Wells' abilities that he invited him to come to Washington and confer with him and Mr. Fessenden, then secretary of the treasury, upon the best methods of dealing comprehensively with the financial necessities of the government. As the result of this conference the Revenue commission was established in 1865, Mr. Wells being appointed chairman by Hugh McCulloch, then secretary of the treasury. This commission reported the result of its labors in 1866, reducing to some order for the first time the chaotic mass of laws enacted during the stress of the war for the purpose of raising money, from which the only principle deducible was expressed in the maxim, "Whenever you find an article, a product, a trade, a profession a source of income, tax it." In its endeavor to establish a scientific basis for estimating the revenue of the government the commission made the first systematic attempt to collect and apply statistics for national purposes, and not long afterwards, under the direction of Mr. Wells, the bureau of statistics was established, Gen. Francis A. Walker, the first chief, being fallen from the office of the Springfield Republican, where he was then assistant editor.

The term of office of the Revenue commission having expired in 1866, Mr. Wells was at once appointed "special commissioner of the revenue" for four years, a position created for the purpose of giving his abilities a more extended scope. The great work of reconstructing, repealing, and modifying the laws relating to the internal revenue was now substantially committed to his charge, and it was performed in a manner that entitled him to the permanent gratitude of his country. He may be said to have originated all the important reforms in the revenue system that were adopted by congress down to 1870, and to have carried many of them through against

strong opposition by the convincing power of his reasoning. Among these reforms were the redrafting of the whole system of internal revenue laws, the reduction and final abolition of the cotton tax, and the taxes on manufactures and crude petroleum, the creation of supervisory districts, and the application of stamps for the collection of taxes on tobacco, fermented liquors, and distilled spirits. Corruption was then at its height in Washington, and the very absurdities and iniquities of taxation had reared powerful forces interested in their maintenance. In Mr. Wells' book entitled "Practical Economics," published in 1885, a most instructive collection of essays suggested by the experience of this period is preserved. It there appears how the whiskey distillers had more than once prevailed upon congress to raise the tax upon their product, exempting that already in bond, with the result of obtaining profits amounting to more than one hundred millions of dollars.

Fiscal legislation of this kind Mr. Wells exerted all his energies to check. In one of his earliest reports he demonstrated the folly of attempting to collect a tax of \$2 a gallon on distilled liquors, perhaps 7,000 per cent of the first cost, and argued that half a dollar a gallon was the rate of tax which would be most productive of revenue. Congress was persuaded eventually to adopt his conclusion, with results which permanently established his reputation as a master of finance. Under the reduced tax the revenue from this source at once rose to nearly three times the amount previously collected—from \$18,655,000 in 1868 to \$55,606,000 in 1870. As an illustration of the statesmanship with which the country was governed and with which Mr. Wells had to contend, we may mention the opposition of a distinguished senator to his proposals, upon the ground that he could never bring himself to confess upon the part of the government of the United States that it was unable to collect any tax that it chose to ordain. No better contrast between genuine and spurious "practical statesmanship" was ever presented.

In 1867 the secretary of the treasury was instructed by congress to present at its next session the draft of a new tariff which should embody a proper reduction of the high duties imposed during the war. Mr. Wells was selected to prepare this draft, and for the purpose of qualifying himself for the work he visited Europe in his official capacity, and thoroughly investigated the conditions and processes of all the leading manufactures, both in England and on the Continent, which could be regarded as competing with those of our own country. Up to this time Mr. Wells, who was identified through his family connections with the manufactures of New England, had been a firm and even fanatical believer in the policy of pro-