## Fumes of the Yellow Monopoly

By HELEN BERNSTEIN

The rate of profit of a monopoly far outstrips the average rate of profit; the cost of production of a monopolized product seldom bears a relation to the price, whereas in the competitive field the two are seldom far apart; a monopoly price usually sits tight while other prices are falling.

One of the neatest, most profitable and least conspicuous monopolies under which workers throughout the world suffer is the sulphur monopoly. It is a small but perfect specimen. Dr. Montgomery of the University of Texas tells its exciting story in a little book called "The Brimstone Game."

Sulphur is most important as a raw material in the manufacture of sulphuric acid. This magical reagent is indispensable in the preparation of fertilizers, illuminating gas, soap storage batteries, paper ink, lead pencils, and celluloid. It is used in the manufacture of steel, dynamite, dyestuffs, medicinals, in the ceramic arts, the packing industry, in the purification of gasoline, kerosene and other petroleum products. The rubber and rayon industries depend upon it. It is used in electroplating and electro-deposition without which tin cans, galvanized iron, and chromium surfacing could not be But because the basic raw material, sulphur, is monopolized, every commodity dependent upon its remarkable properties will bear some price taint of the original sin of monopoly rent.

From the Middle Ages down to the end of the nineteenth century, Sicily was the main source of sulphur in the world. In the 1890's the mining methods were the same as those described by the prophet Isalah three thousand years ago. There were over 700 small independent mines in Sicily out of which 25,000 workmen earned a degraded living. Competition was severe and the price was unstable. In the de-

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pression of the 1890's, the price fell from \$23 a ton in 1891 to \$12 a ton in 1895.

The conditions resulting from this economic disaster brought the threat of revolution to Sicily and considerable alarm to British interests which controlled the sulphur-using industries in Europe. These interests succeeded in 1896 in doing for the sulphur producers what they had been unable to do for themselves. namely, organize them. The new Anglo-Sicilian Company contracted to handle the sales of sulphur for ten years and guaranteed a minimum price of \$15 per ton at the mine provided production were stringently limited. As sulphur was then selling for \$10, the company managed to secure options on 85% of the output. This was the first sulphur monopoly.

Within a year, at the very bottom of the depression prices rose by more than 50% and were maintained at an average of \$18 per ton for almost 10 years.

This state of affairs might have gone on indefinitely had it not been for the work of an obscure Standard Oil chemist, Herman Frasch, In 1865 oil prospects discovered huge deposits of almost pure sulphur in Louisiana. Three attempts to mine the yellow substance failed because the deposit was overlaid by a blanket of hard limestone and gypsum, which was in turn covered by quicksand and sea mud. Engineers had declared the mining hopeless-when Frasch came out with a technique peculiarly adapted to these very conditions. He secured a patent, and after the discovery of a vast oil-fuel field near the sulphur beds, organized the Union Sulphur Company and began operations in 1901.

Doubly protected by a patent and the possession of a natural resource, the new company proceeded to rid itself of the Anglo-Sicilian Company. It slashed prices from \$22 per ton to \$16; by 1906 it had captured the American and North European markets. Over one hundred Sicilian

mines closed down. The Anglo-Sicilian Company did not renew its contracts. In despair, the Italian government sent a royal commission to Louisiana to investigate this destroying rival. To their even greater despair, they discovered that Union was producing at a cost of \$3.48 a ton and could sell anywhere in America at \$7.72 a ton—less than one-half the cost of production of the best Sicilian mines.

The Italians attempted to reach an agreement but refused to meet all of Union's terms. Union slashed the price to \$14. Whereupon the Italians played their last card. A compulsory sales pool was organized and backed by a ten million lire government subsidy. It was relieved of taxes and its freight rates were duced. The pool, the Consorizio Obligatorio Per l'Industria Solfifera Siciliana, rashly cut to \$12 per ton, disastrously low despite the subsidies.

In 1907 Frasch went to Rome and reached an agreement with a badly frightened Consorzio. Union was allotted the North American market and one-third of the north European. Italy was reserved for the Italians. A minimum price was set at \$18.50, to be reached by 1908, to be boosted to \$22.50 by June 1, 1909.

On a public occasion Frasch commented on this deal in these words: "Fortunately the (Union) Company is owned by a few broad-minded and big-hearted men who could not be induced to bring starvation and ruin upon 25,000 people dependent upon the mining of sulphur in Sicily." This is small consolation to millions of farmers who pay more than 10% of their gross income for fertilizer, (to say nothing of the rest of the consumers of sulphur products), putting millions of dollars of monopoly rent into the pockets of-not the Sicilian miners—but certain interested parties in the United States.

Through its patents Union had complete mastery of the American industry from 1903 to 1913. The value of this monopoly is hidden in

obscure and indefinite data. Some obtainable figures are indicative. The Italian Commission reported costs to be \$3.48, but did not list the items included. Mining Industry calculated costs at \$3.75 a ton, which included depreciation of the plant and equipment but not of the deposit itself. The company's own reports in Moody's Manual show that costs in 1907-13 fluctuated between \$3.75-\$4.50, which included all costs except interest on the investment. Throughout this period the price stayed at \$18 f. o. b. the mine, which would indicate a profit of \$13.50-14.25 per ton. In 1913-Dr. Montgomery furnishes this data-491,000 tons were produced at a profit of \$13.85 per ton; indicating that the above figures were not far off.

Dr. Thurmond L. Morrison in his "Economics of the Sulphur Industry" (University of Texas, 1938) expresses the belief that during this period "... annual profits, expressed as a percentage of total investment, made by Union Sulphur Company fluctuated between 150% and 400%"! Another indication of the huge profits made by Union is the fact that, though it began operations with a capital stock of only \$200,000 by 1913 it had accumulated in leases, townsites, plant and equipment, properties worth about \$1,900,,000; apparently the product of reinvested profits.

However, Union was unable to maintain its hegemony in the sulphur world. In 1906 an attempt had been made to work a large sulphur dome in Texas by the Frasch process. Union sued for patent infringement and after years of litigation the Federal Circuit Court of Philadelphia held that the techniques originally covered by the patent were unpatentable. The Freeport Sulphur Company was organized in 1913; but during the World War the tremendous demand for explosives for which sulphur is essential prevented any outbreak of competition, and the price was maintained at \$18 per ton until 1917. After our entry into the war the price of sulphur was fixed at \$22.50, informally at first by the Chemical Committee of the Council of National Defense

and then by the War Industries Board. The Federal Trade Commission at this time reported that the cost of production to Freeport was \$6.15 per ton and to Union \$5.75. Conscripts may be sacrificed; but not profits.

The supply of sulphur great as it was, could not fully meet the requirements of warfare and so a new giant entered into the sulphur field. the Texas Gulf Sulphur Company. Theodore J. Kreps, an outstanding authority on the subpect, asserts in his "Economics of the Sulphuric Acid Industry" that ". . . the War Industries Board marshalled the resources of the United States government behind the effort to develop a reliable and sufficient supply of domestic sulphur," and indeed it is generally believed that some form of government subsidy acted as midwife at the birth of Texas Gulf. although the company itself has always denied the charge. At any rate, it constructed the largest and most efficient Frasch-process plant the industry had ever known.

The War Industries Board released its price control in 1919, war orders were no more, the industry was left with tremendously over - expanded plants and a huge accumulation of stock over-ground. A period of competition among giants set in and for several years after the war the average price varied from \$15.11 to \$19.76 a ton. In 1922 peace was declared. The Sulphur Export Company (Sulexo) was formed under the Webb-Pomerene Act of 1918. which permitted American corporations in any line of industry to combine their export businesses. Exports were allocated among Union. Texas and Freeport. However, the formation of this combination served also in some mysterious way to prevent price competition not only in foreign markets but in domestic markets. The following year, Sulexo and Consorzio formed a new alliance, which constituted a virtual world monopoly. Prices rose to a minimum of \$18 a ton and there they have remained through wars, revolutions and depressions.

How profitable has Texas Gulf

Sulphur been since its formation? The figures are almost beyond belief. Professor Montgomery, using the company's reports in Moody's Manual, shows that about four million had been invested in plant and equipment during the first ten years of active operations. Originally 635,-000 shares of common stock were issued, having a total par value of \$6,350,000. During the past eighteen years Texas has paid a total of \$124,117,500 in cash dividends on this stock, which amounts to 95.46% per year on the basis of the original value of the stock! In addition to this concrete evidence, the company has spent \$15,613,000 in leases, in exploration work, in buildings and equipment-all expenditures coming out of profit. The company has eighteen other deposits which are not being worked at the present time. It has reserves of recoverable sulphur at Boling Dome alone valued at \$45,000,000. It has had enough left over to pay vast sums to landowners, leaseholders and other tribute-collecters. On January 1. 1939 the company had 3,289,728 tons of sulphur in its stock piles above ground; with a market value of more than \$52,000,000. E. D. Kennedy in "Dividends to Pay" points out that the Texas Gulf Company now makes \$1 profit on every \$2 of sales. In the period between 1926 and 1935. its sales totalled \$206,000,000 out of which it made a net profit of \$103,-000,000. Monopoly privilege enabled it to net during the worst depression America has ever experienced a mere 50% on its gross!

The evil effects of this monopoly are almost self-evident. Labor and capital are shut off from the opportunity to produce sulphur in that plentiful supply that a healthy market would demand. This in turn is felt in all the industries which require sulphur in their manufacturing processes and which must consequently raise their prices and cut down demand. Labor and capital are pressed into service in sadly over-exploited fields, like agriculture, where returns are at best precarious and poor, while a few pockets the fruits of privilege on the sunnier side of the vicious circle.