Death of Joseph Sidney Seaman

JOSEPH SIDNEY SEAMAN, one of the outstanding figures of the foundry industry, past president of the American Foundrymen's association and patron of research in the science of casting metals died at his home in Pittsburgh, Wednesday, June 15. Mr. Seaman was born in Harmony, Butler county, Pennsylvania, Aug. 14, 1839. He was educated in the public schools and in Conoquenessing Academy. When only 17 years old he removed to Pittsburgh, taking employment first as a carpenter, when for a year he helped one of his brothers build cabins for river steamboats plying in neighboring streams.

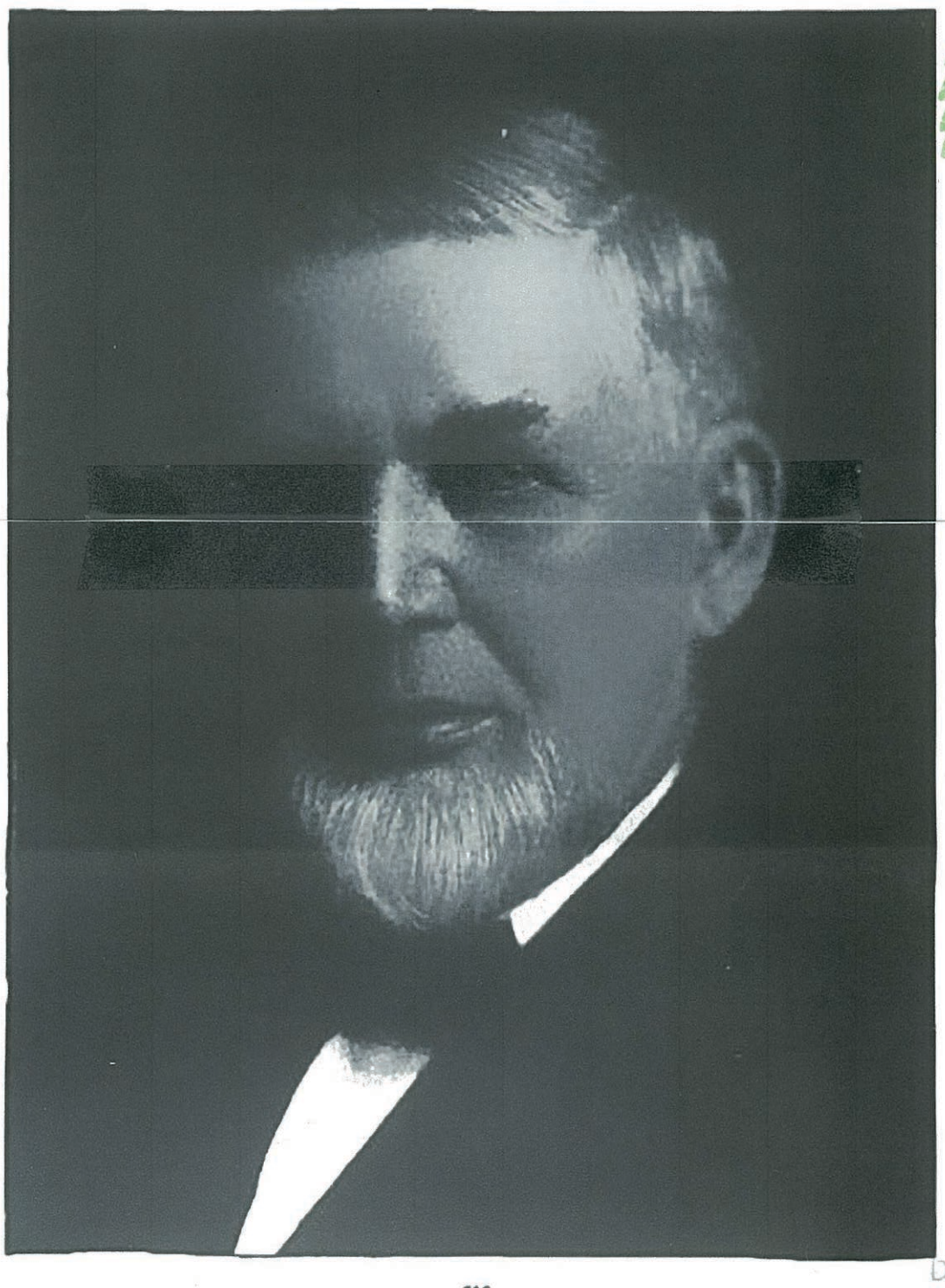
His identification with the metal industries, where he achieved such marked success, began with his association with Samuel Leonard, through whom he had the opportunity to learn the roll turning trade. For four years, Mr. Seaman worked in a shop in old Pipe Town, now Second avenue, Pittsburgh. Later he accepted a position with the Pittsburgh Foundry Co., which now is the A. Garrison Foundry Co. While employed with this company he turned the rolls which fabricated the first crucible steel made in Pittsburgh.

At the outbreak of the Civil War, he directed his attention to turning and finishing cannon for the Union forces. He was ambitious to join the army, but by reason of his skill he was informed that his duty lay with the second line of defense, in the arms factories of Pittsburgh. His desire for military service was met through enlistment in Kamp's battery of that city, but this unit was not called into service.

Mr. Seaman left the Pittsburgh Foundry Co. to take charge of the shop of Hussey, Wells & Co., where he worked for three years. The Black Diamond Steel Works, later engaged him to direct its work.

In 1869, Mr. Seaman embraced the opportunity to enter the foundry business for himself. With a few associates, he built a small shop at Liberty and 25th streets which was operated sucessfully under the names of Bollman & Co.; Bollman, Boyd & Baggaley; Baggaley Young & Co.; James B. Young & Co.; and Seaman, Sleeth & Black. In 1885 the Seaman-Sleeth Co. was incorporated by Mr. Seaman and Robert Sleeth. When in July, 1917, the Seaman-Sleeth Co., and the Phoenix Roll works were merged as the Pittsburgh Rolls Corp. Mr. Seaman was elected chairman of the board, with David L. Eynon, president.

During the period that Mr. Seaman operated the Liberty street plant, George Westinghouse was engaged in developing the airbrake and a number of other valuable mechanical devices. The first successful airbrake was made in the foundry in which Mr. Seaman was interested, and subsequently the Westinghouse Airbrake Co. purchased the foundry for its own use. The Seaman-Sleeth Co. later erected a new plant at Forty-second street. The company prospered and increased its capacity until its output was over five times what it had been at the start. On his seventy-fifth birthday, April 14, 1914, the employes of the company presented Mr. Seaman with a written testimonial, expressing their high regard for him as a man and an employer.



In 1891, when a meeting was called in Philadelphia to organize a technical society to represent the fast developing foundry industry, Joseph S. Seaman, Seaman-Sleeth Co., Pittsburgh, was one of the registered delegates and a factor in the formation of the American Foundrymen's association. From that time forward he was an active and earnest

worker in that organization and by his effective interest endeared himself to all who were identified with the association's development. In 1899, during the first Pittsburgh convention, Mr. Seaman was chosen president. He was the third man to achieve this honor.

During the convention of the association, held in Columbus in 1920, Mr. Seaman with three other veterans of the industry, J. H. Whiting, W. H. McFadden and John A. Penton established a fund to further research in the lines of scientific foundry knowledge. Mr. Seaman's gift of $5000 was given to provide an income which will serve to reward some noteworthy contribution to foundry knowledge. This action was followed by other donations for similar purposes.

For several years, Mr. Seaman has been the oldest ex-president of the association. He was a past president of the Pittsburgh Foundrymen's association, a member of the Duquesne Club, the Country Club, the Pittsburgh Athletic association, the Engineer's Society of Western Pennsylvania, the American Iron & Steel Institute, the Pittsburgh Chamber of Commerce, and the Chamber of Commerce of the United States. He was president of the Pennsylvania National Bank and the Pennsylvania Savings Bank.

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ganese in the iron can be increased by adding pea-size ferromanganese to the ladle or by putting a small amount of spiegeleisen on the charge, but either of these expedients would increase the cost of the mixture.

It will be difficult to keep the sulphur in cast iron made from a mixture of 50 per cent pig iron and 50 per cent stove plate scrap around 0.08 per cent, especially if the manganese must be held near 0.45 per cent. It would be necessary to use a low-sulphur coke to do this. If the iron then comes above 0.08 per cent in sulphur the sulphur might be lowered by adding an excess of limestone on each charge. This would add expense for the stone and extra coke required to heat it.

The correct amount of silicon can be obtained either by buying a pig iron high enough in silicon or by adding ferrosilicon to the charge in the cupola. If you use stove plate you should see that it is comparatively free from burnt iron. It would be better to use as much as possible of the scrap from this mixture. Calculating the scrap as containing 2.50 per cent silicon the cost of different grades of pig iron can be estimated.

The metal will lose 0.25 per cent silicon in the cupola, therefore, to secure 2.90 per cent silicon in the metal the charge will have to average 3.15 per cent silicon which can be secured with ferrosilicon are used the cost can be figured similarly:

Per cent		Silicon	Total
.763	x	2.00	1.526
.237	x	10.00	2.37
		Ave. silicon	3.896

This will cost per gross ton:

.763	x	27.14	$20.71
.237	x	43.64	10.34
		Total	$31.05

These figures indicate that the cost of a charge would be cheaper if No. 2 pig iron is used instead of No. 1 X. The following example shows the relative cost when 6.00 per cent ferrosilicon is used in place of the 10.00 per cent grade as previously calculated. Using the same method of calculating:

Per Cent		Silicon	Total
.525	x	2.00	1.05
.475	x	6.00	2.85
		Ave. Silicon	3.90

The cost per gross ton will be:

.525	x	27.14	$14.25
.475	x	35.64	16.93
			$31.18

From the foregoing figures it can be seen that on a basis of the cost of the charge the cheapest combination is one in which No. 2 pig iron is used with 10.00 per cent ferrosilicon. This can be secured at a cost of $31.05 per gross ton. However, the cost of the