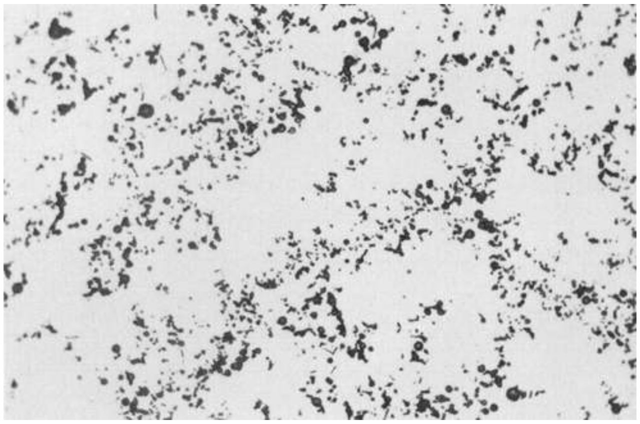

Fig. 2—Optical micrograph of the clustered alumina particles. Magnification 360 times.

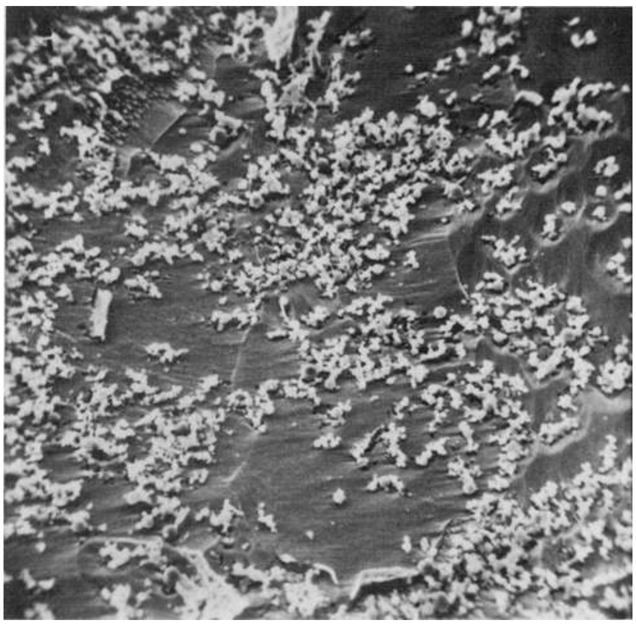

Fig. 3—Scanning electron micrograph of deep-etched specimen showing the shape and distribution of the alumina particles. Magnification 498 times.

ing of the alumina particles range from the initial contact stage, through an intermediate stage in which a definite radius of curvature exists between particles,

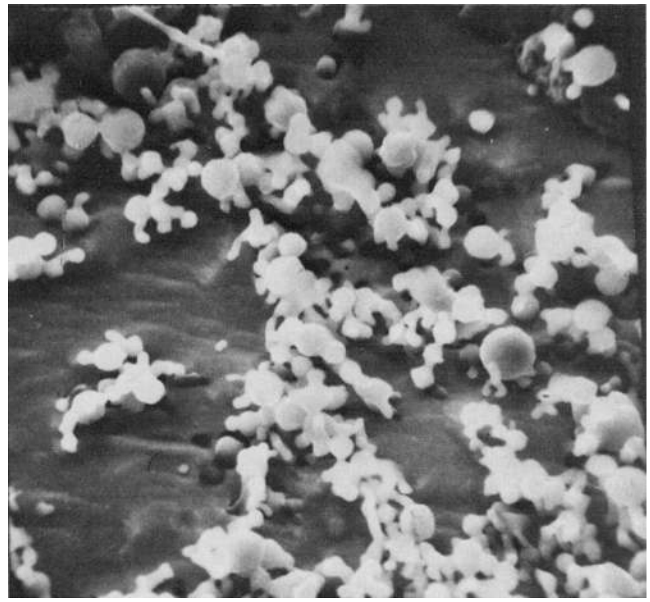

Fig. 4—Scanning electron micrograph showing the various stages of sintering of the alumina particles. Magnification 2115 times.

to the final stage in which two or more particles are completely sintered together to form one large particle.

Normally in aluminum-killed steel ingots, the alumina inclusions, as seen under an optical microscope, appear to be clusters. With the polishing-down technique[5] and more recently with the scanning electron microscope,[4] it has been shown that these clusters are dendritic in nature. In the present study of alumina particles from steel frozen in constricted nozzles, no such alumina dendrites were observed. This difference in morphology is probably due to the different mechanisms involved in the precipitation and growth of alumina in the two cases.

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3. D. C. Hilty and John Farrell, Union Carbide Corporation, Ferroalloys Division, Niagra Falls, N. Y., private communication.
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5. R. Torsell and M. Olette, *Rev. Met.*, 1969, vol. 66, No. 12, pp. 813–22.

Corrections to *Met. Trans.*, 1971, vol. 2

Formation of Hcp and Bcc Phases in Austenitic Iron Alloys, by J. F. Breedis and L. Kaufman, pp. 2359–71.

Page 2365, Equation [2]
Page 2366, Equation [3]
Page 2368, Equation [7]

The above equations were published incorrectly. The correct equations are as follows:

$$\Delta F^{\epsilon\rightarrow\gamma} = (1-x)\Delta F_{\mathrm{Fe}}^{\epsilon\rightarrow\gamma} + x\Delta F_{j}^{\epsilon\rightarrow\gamma} + F_{E}^{\gamma} - F_{E}^{\epsilon} \text{ cal per g-atom} \quad [2]$$

$$\Delta F_{\mathrm{Mn}}^{\epsilon\rightarrow\gamma} \simeq 250 + 0.30T + 5.5\times10^{-4}T^{2} + F_{\mathrm{Mn}}^{\gamma} \text{ (magnetic) cal per g-atom} \quad [3]$$

$$\Delta F^{\alpha\rightarrow\gamma} = (1-x-y)\Delta F_{\mathrm{Fe}}^{\alpha\rightarrow\gamma} + x\Delta F_{j}^{\alpha\rightarrow\gamma} + y\Delta F_{k}^{\alpha\rightarrow\gamma} + x(1-x-y)(G-A)_{\mathrm{Fe}\text{-}j} + y(1-x-y) \times (G-A)_{\mathrm{Fe}\text{-}k} + xy(G-A)_{j\text{-}k} \quad [7]$$