CORRECTION TO MY PAPER, "ON < 8 >-COBORDISM"

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In on $\langle 8 \rangle$ -cobordism, Illinois J. Math., vol. 15 (1971), pp. 533-541, the proof of Theorem 3.3 is incorrect. The statement of the theorem, and the outline of a correct proof are given below.

THEOREM 3.3. (i) $d_2(\tau) = h_2 \omega$, $d_2(\kappa) = h_0 d_0$. (ii) $d_r(x) = 0$ for all r. (iii) $d_3(e_0) = \omega c_0$.

Proof. (i) The sequence

$$\pi_{12}(BO) \xrightarrow{J} \pi_{11}(S) \rightarrow \Omega_{11}^{\langle 8 \rangle} \rightarrow \pi_{11}(BO)$$

is exact, and J is the ordinary J homomorphism. Hence $\Omega_{11}^{<8>} = 0$, so $d_2(\tau)$ $h_2 \omega$. The second part of 1 follows from $h_0 \kappa = h_2 \tau$.

(ii) By computing the relative group $\Omega^{<8>, \rm spin}$ one shows that $\Omega_{15}^{<8>} = \mathbb{Z}_2$. Since there is only one infinite cycle in dimension 15, $[h_0^2 \kappa]$, all the elements in dimension 16 must be infinite cycles, so (ii) follows.

(iii) It can be shown by a homotopy argument that ωc_0 cannot live to E_{∞} . It must be a cycle, hence also a boundary. Thus $d_3(e_0) = \omega c_0$.

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