Correction to my paper "Generalization of a theorem of Birkhoff..."*).

By G. SZÁSZ in Szeged.

J. JAKUBÍK has kindly called my attention to the fact that the proof of Theorem 3 is not correct, because the relation Θ is not a congruence relation on H. The proof may be corrected as follows.

Let S_1 and S_2 be the sets consisting of all real numbers x_1, x_2, respectively, such that

$$0 \leqq x_1 \leqq 1; \quad 0 \leqq x_2 < 1, \; x_2 \text{ rational},$$

and let S_1, S_2 be partial ordered in the natural way. Consider the set H of all couples (x_1, x_2) $(x_1 \in S_1, x_2 \in S_2)$, partial ordered as in the original proof. Then H is the cardinal product of the chains S_1, S_2. Consequently, H is a distributive lattice without greatest element. By adjoining a greatest element I, we get a lattice L which is again distributive. Now, consider in L the chains C_1, C_2 consisting of the elements

$$C_1: (0, x_2) \; (x_2 \in S_2), \text{ and } I,$$
$$C_2: (x_1, 0) \; (x_1 \in S_1), \; (1, x_2) \; (x_2 \in S_2), \text{ and } I.$$

Clearly C_1 and C_2 both are maximal, however C_1 is countable and C_2 is not countable. Thus our theorem is proved.

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*) *These Acta,* **16** (1955), 89—91.