Now it is easy to prove the assertion of our theorem. Let h be an arbitrary integer $\geqq 4^r$, hence $h^{\frac{1}{r}} \geqq 4$; put $P = \left[h^{\frac{1}{r}}\right] - 1$, then

$$P > h^{\frac{1}{r}} - 2 \geqq \tfrac{1}{2} h^{\frac{1}{r}} \text{ and } P + 1 \leqq h^{\frac{1}{r}},$$

hence $P^r + 1 \leqq h$. It follows, that every sequence $1, 2, \ldots, h$ contains at least one number k, such that $c_2 \lambda_k^2 \geqq P > \frac{1}{2} h^{\frac{1}{r}}$. For sufficiently large h clearly $\lambda_k^2 > \lambda_1^2$, hence λ_k is positive and it follows $\lambda_k > c_3 h^{\frac{1}{2r}}$, where $c_3 = \frac{1}{\sqrt{2c_2}}$. Now $h \geqq k$, hence $\lambda_h \geqq \lambda_k > c_3 h^{\frac{1}{2r}}$. If we take for c a positive number $< \frac{1}{2r}$, then

$$\lambda_h > h^c$$

for all but a finite number of values of h.

Mathematics. — *Remark on my paper „On* LAMBERT'*s proof for the irrationality of* π". By J. POPKEN.

In these Proceedings [1]) I have given an elementary proof for the irrationality of π. However Dr M. VAN VLAARDINGEN kindly informed me, that the method I used nearly is the same as that applied by HERMITE in the fourth edition of "Cours de la faculté des Sciences" (1891), p. 74—75 [2]).

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[1]) Vol. XLIII (1940) p. 712—714.

[2]) See also: A. PRINGSHEIM, Vorlesungen über Zahlen- und Functionenlehre II, 1, p. 471—474; p. 613.