In the other wave type, the plane of the magnetic ellipse is normal to the axis of bending; these waves are magnetically oriented ( $M O_{m, n}$ wave type) and their fields are obtainable from $E_{y}$. In each case the order of Bessel functions is equal to the angular phase constant.

For a bent pipe formed by the intersection of two concentric spheres and two coaxial cones emerging from the center there is also a solution in terms of known functions. In one wave type, $E O_{m, n}$ type, the plane of the electric ellipse is normal to the radius; in the other, $M O_{m, n}$ type, the plane of the magnetic ellipse is normal to the radius. The fields of $E O$-waves are calculable from $H_{r}$ and the ficlds of $M O$-waves from $E_{r} ; H_{r}$ and $E_{r}$ themselves can be expressed in terms of Bessel and Legendre functions. These waves may be called spherically oriented in order to distinguish them from the plane oriented waves described earlier. The letters $S$ and $P$ in front of $E O$ and $M O$ may be conveniently used in the abbreviations.

CORRECTIONS TO MY PAPER

## A STRAIN ENERGY DERIVATION OF THE TORSIONALFLEXURAL BUCKLING LOADS OF STRAIGHT COLUMNS OF THIN-WALLED OPEN SECTIONS

QUARTERLY OF APPLIED MATHEMATICS, 1, 341-345 (1944).

## By <br> N. J. HOFF

In the last term of the right hand side member of Eq. (3) on page 343, $n$ should be raised to the second power and not to the fourth power.

The following equation defining $T$ should be added:

$$
T=\left(1 / \rho^{2}\right)\left(n^{2} R+G C\right)
$$

