Fig. 2. RF-reaction chamber with quenching device.

of one of the samples showed the presence of acetylene and unreacted methane only; other peaks, such as ethylene and ethane, were not observed. The plasma flame did not have the bell-like shape as before and was directed toward the upper surface of the copper cooling tube.

Table 3 gives the data on the conditions and results of some of the experiments carried out using the copper tube for a distance of 1 in. between the surface of the tube and the electrode tip. Comparing these results with the ones obtained without using any quenching device, one can observe that slightly better yields are obtained by using such a cooling device.

The production rate always increased as the quantity of methane added to the plasma was raised.

By using helium in small excess only, higher conversions into acetylene are achieved by introducing greater amounts of methane into the plasma. With large excesses of helium, higher conversions into acetylene are achieved by feeding lower amounts of methane to the plasma.

TABLE 3. ACETYLENE PRODUCTION USING
QUENCHING DEVICE AT 1-IN. DISTANCE

Gas flow (st. cc./sec.)		Power input (watts)	Conversion to C_2H_2 (based on carbon input)	
Helium	Methane		%	mg./min.
1.8	1.2	319	5.6	2.3
1.8	1.6	323	15.6	8.7
3.8	1.6	472	24.7	13.8
7.7	1.6	530	26.9	15.0
7.7	2.0	523	25.1	17.8
7.7	2.4	472	23.5	19.5
12.2	1.6	517	28.1	15.7
12.2	2.4	529	26.2	21.8

ERRATA

Some minor errors have been found in the paper "Numerical and Experimental Study of Damped Oscillating Manometers: II. Non-Newtonian Fluids" by John C. Biery (Vol. 10, No. 4, pp. 551-557, July, 1964) as follows:

1. Equation (1)—The first term should have a $-\eta_o$.

2. Page 556, E. E. Wissler should be E. H. Wissler.

3. Figures 2, 3, and 4 should be titled across the abscissa—Minus Shear Rate, $-Sec.^{-1}$.

4. The units in Table 4 should be listed in a footnote as follows:

$$\eta_o = \frac{dynes\ sec.}{sq.\ cm.}, \beta = \frac{dyne\ sec.^m}{sq.\ cm.},$$

$m =$ dimensionless, $\lambda_1 =$ sec., $\lambda_2 =$ sec.

In the paper "Solids Mixing in Straight and Tapered Fluidized Beds" by Howard Littman (Vol. 10, No. 6, pp. 924-929, November, 1964), the figures are incorrectly labeled. They should be as follows:

Fig. 6. Activity-time curves, untapered bed, 32-in. nominal bed height. Fig. 7. Activity-time curves, tapered bed, 16-in. nominal bed height. Fig. 8. Activity-time curves, tapered bed, 32-in. nominal bed height. Fig. 9. Movement of activity front in tapered and untapered beds.