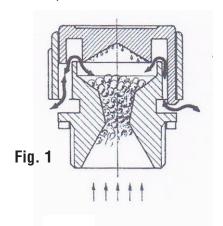






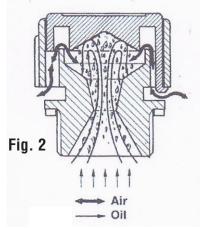
AS-NY-4 ANTI SPLASH BREATHER

The following results were obtained from a test using Lenz AS-NY-4 assembled on top of gearbox. The gearbox was operated at speeds from 600 to 3600 RPM. Stage 1 and 2 were run with SAE 90 weight oil.



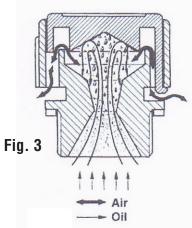
STAGE 1

The initial test started with cold oil and a strong spray generated by the gear set an oil/air mixture, which entered into the restrictive orifice in the base of the filler breather. The results demonstrated the air did escape but the oil was contained. (see figure1).



STAGE 2

In the second stage of our test, the oil was at a temperature of 140-160 degrees F following the same procedure as in stage 1. The oil drops collect, and with the increased rate of weight, fall back into the reservoir (see Figure 2).



STAGE 3

In the final stage (see figure 3) we used the same standard procedure. This time we used maximum working temperature of the gearbox 212 degrees F. The high temperature made it very difficult to deflect atomized oil/air. However the orifice structure of the AS-NY-4 gave excellent results over an extended period of time.

STAGE 4

We tested in this stage a low viscosity oil SAE 20. The conditions are were not as severe and the results were similar in both high and low temperatures. The orifice design in the fitting base permitted air to exhaust and continued to trap the oil in the gearbox.



