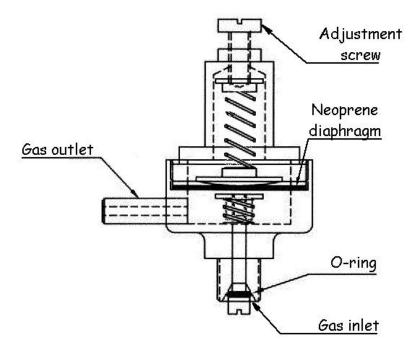
## Gas Pressure Regulator by Ernest Glaser and Felix Heufke

In the general arrangement drawing below the tube connection to the gas inlet is not shown. This should have an internal thread matching the thread on the gas inlet and a tubular extension similar to that shown for the gas outlet.

The regulator consists of an upper and a lower chamber separated by a flexible (neoprene) diaphragm. The upper chamber contains a convex pressure pad which is pushed down onto the diaphragm by a compression spring. The pressure exerted by the spring can be adjusted by means of a screw. The lower chamber, through which gas passes from inlet to outlet, contains a bolt surrounded by a compression spring which tends to close the inlet gas-tight by mean of the **O**-ring.



The flexible diaphragm moves up and down according to the gas pressure. If the gas pressure in the burner should drop the pressure in the lower chamber of the regulator will, of course, also drop and the upper spring will cause the pressure pad and diaphragm to be pushed down eventually making contact with the bolt in the lower chamber and causing the gas inlet to be opened. High pressure gas from the supply tank is now admitted to the lower chamber of the regulator causing the diaphragm to push the pressure pad upwards and the gas inlet valve to shut.

By means of the adjustment screw a certain balance can be achieved and the results are said to be very good.

Design and drawing: <u>Ernest Glaser</u>. Original description: <u>Felix Heufke</u>

Translation and adaptation: Dick Summerfield.