

Rare Arras 1940

by Werner Horning

In 1940 a gas testing lamp was invented by Arras, France. Its designation was:

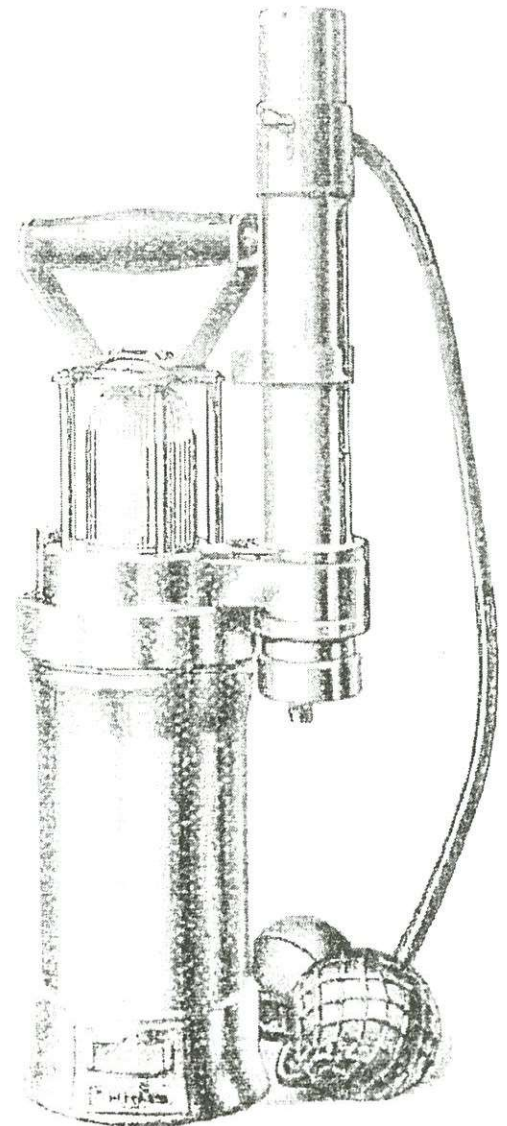
Gas-Test Lamp - Lampe Grisoumetre a combustion
G.D.A.2 Daloz-Arras

It is an alkaline battery powered lamp adapted with a gas testing device. The lamp weights 4.7 kg. The battery compartment is 97 mm in diameter, and the total length is 410 mm. The diameter of the gas-tester is 32 mm.

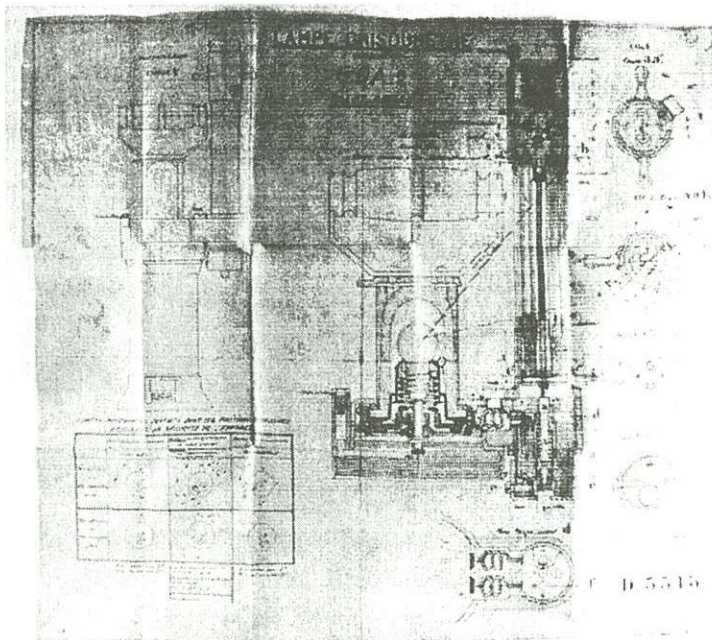
Two minutes set-up time are necessary before a measurement can be made. That is: 50 seconds for feeding and handling, 10 seconds for the combustion and 60 seconds for cooling down.

Technical data of the device are:

- Temperature of filament: 1,300 - 1,500 degrees Celsius
- Current consumption: 2.6 V
- Number of measurements which are possible: appr. 30
- Duration of combustion: 10 seconds
- Time to read manometer: 1 minute after combustion
- Limit of reading: 4 %.



Grisoumètre électrique



The basic principle is that a sample of gas is heated by a platinum wire within a closed combustion chamber. When the gas is heated it expands and drives a telescopic plunger against a spring loaded pressure gauge.

To use the lamp a rubber bulb draws air up into the chamber. A switch then is used to electrify and heat the wire.

I was able to examine a spec sheet and instructions at the Dawo-Auction in Saarbruck, Germany. These lamps are very rare.