

Fig. 1. Arrangement of apparatus for studying the effect of uniform compression on ~~the~~ saturated magnetization at low temperatures. 1) Sample, 2) measuring coil, 3) compression chamber made of nonferromagnetic bronze, BrAZhM, 4) magnetizing coil, 5) Dewar vessel, 6) reducer, 7) upper tube, 8) gas-inlet valve, 9) compression cylinder, 10) manometer, 11) T joint, 12) lower tube, 13) ~~comp~~<sup>pensat</sup>ensing coil, 14) hydrocompressor, 15) transformer oil, 17) valve.

## KEY

- 1) Pressure drop
- 2) Gas from cylinder

rod and inner walls of the chamber is about 0.2 mm) ; this enables the rod to be compressed on all sides. The high pressure in the chamber is achieved by reducing the original volume of the gas in the inside of the apparatus by forcing the transformer oil 16 into the compression cylinder 9 through the tube 12 by means of the hydrocompressor 14. The chamber containing the sample and the measuring coil  $C_m$  (2) fitting over the chamber\* are placed in a Dewar vessel 5 filled with liquid nitrogen.

The ~~main circuit~~<sup>principle</sup> of the electrical-measuring circuit appears in Fig. 2. The magnetizing field  $H$  inside the magnetizing solenoid  $C_H$  is created by a steady current of up to  $i_{max} = 20$  A ;

\* The measuring coil was placed inside the chamber in /2/.