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On a new voltaic battery

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graphed. Parallelepipeds and right octahedra, which appear to belong to the cubic system, are readily distinguished.

The determination of the pressure under which the solidification takes place at different temperatures presents some difficulties; the liquid is warmed by the compression, it must be compressed slowly, and the moment of crystallization is more difficult to hit upon. The inverse phenomenon taking place with diminution of pressure, we obtain a pressure of fusion and a pressure of solidification, the interval between which is made as small as possible and the mean taken.

I have thus found that chloride of carbon solidifies:—

At	—19°.5	under a pressure of	210 atmospheres.
"	0°	" " "	620 "
"	10°	" " "	900 "
"	19°.5	" " "	1160 "

I have made one experiment with protochloride of carbon (C_2Cl_4); at 0° it is not solidified under a pressure of 900 atmospheres.

I have likewise examined benzene, which, at 0°, solidifies under the normal pressure; but an accident having interrupted these researches, I have only been able to prove that at 22° it crystallizes in beautiful feathers under a pressure of about 700 atmospheres (approximate).

The question arises whether there is not, for each liquid, a temperature above which solidification cannot take place under any pressure, that is to say a critical temperature of solidification, in the same way that there appears to be a temperature below which the body remains solid under the feeblest pressures. This I must leave for further investigation.—*Comptes Rendus*, July 18, 1887.

ON A NEW VOLTAIC BATTERY.

BY F. FRIEDERICHs IN STÜTZERBACH.

The novelty in this battery consists in the mode of filling and emptying the exciting liquid, by an arrangement met with in some forms of apparatus for generating sulphuretted hydrogen. A series of tubulated bell-glasses, supported with their necks downwards, are connected by means of caoutchouc-tubes with a horizontal glass tube containing as many tubulures as there are glass vessels. One end of this horizontal tube is connected by means of an india-rubber tube with a tubulure in a large glass reservoir containing the exciting liquid. This vessel can be raised or lowered to any desired extent, and thus the cells can be filled to any height or can be emptied. The emptying is facilitated by a stopcock in the other end of the tube.

If it is wished to use a smaller number of cells the india-rubber tube connecting the cell and the horizontal tube can be clamped by a stopcock.—Wiedemann's *Annalen*, No. 9, 1887.