

Shapes of flux domains in the intermediate state of type-I superconductors

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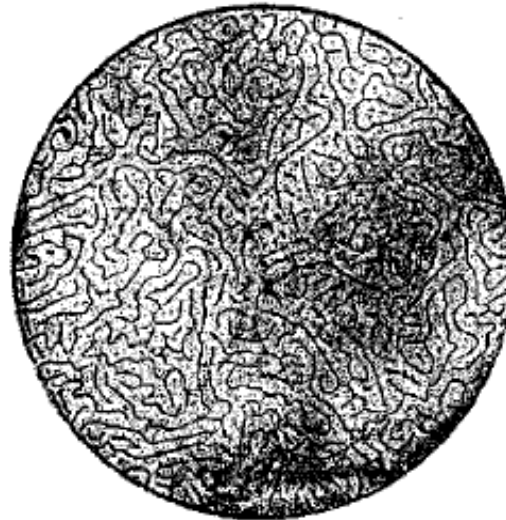
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FIG. 1. Intermediate state of indium, in which superconducting regions (black) are decorated with niobium. The applied field is close to the critical field ($H_a/H_c = 0.931$). Adapted from Haenssler and Rinderer (Ref. 3).

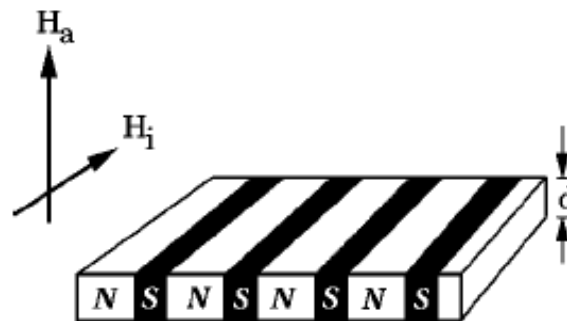


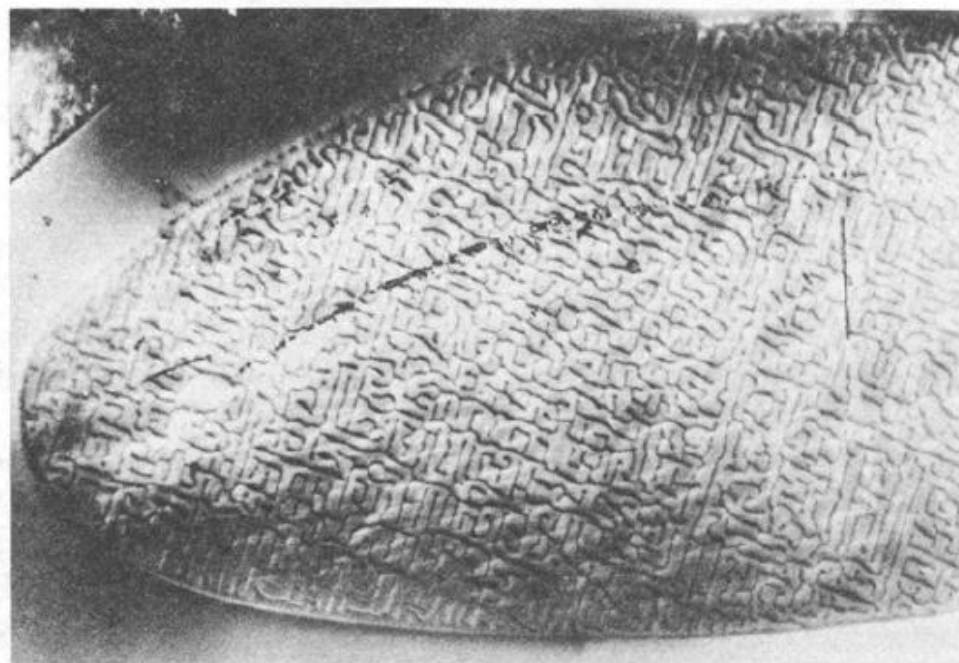
FIG. 2. Laminar state in a thin slab. The applied field H_a is normal to the slab. An ordered laminar structure is obtained with an additional in-plane component H_i .

The Intermediate State in Superconducting Mercury*

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233 G

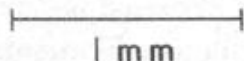
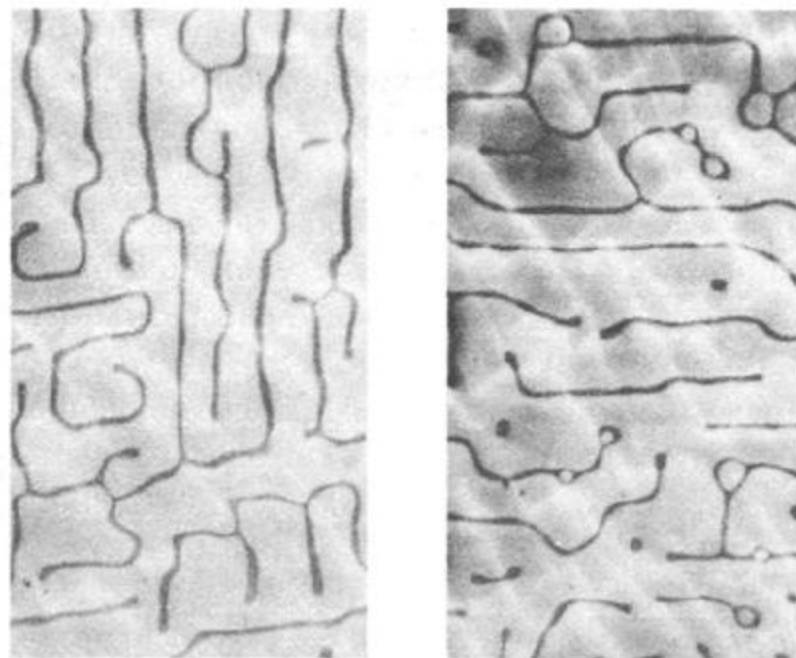


Fig. 3. Domain structure in mercury with $106 \mu\text{m}$ thickness (sample M62) at 233 G. H was decreased monotonically from just below H_c . Superconducting phase is dark.



a 262 G

b 284 G

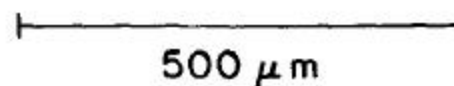
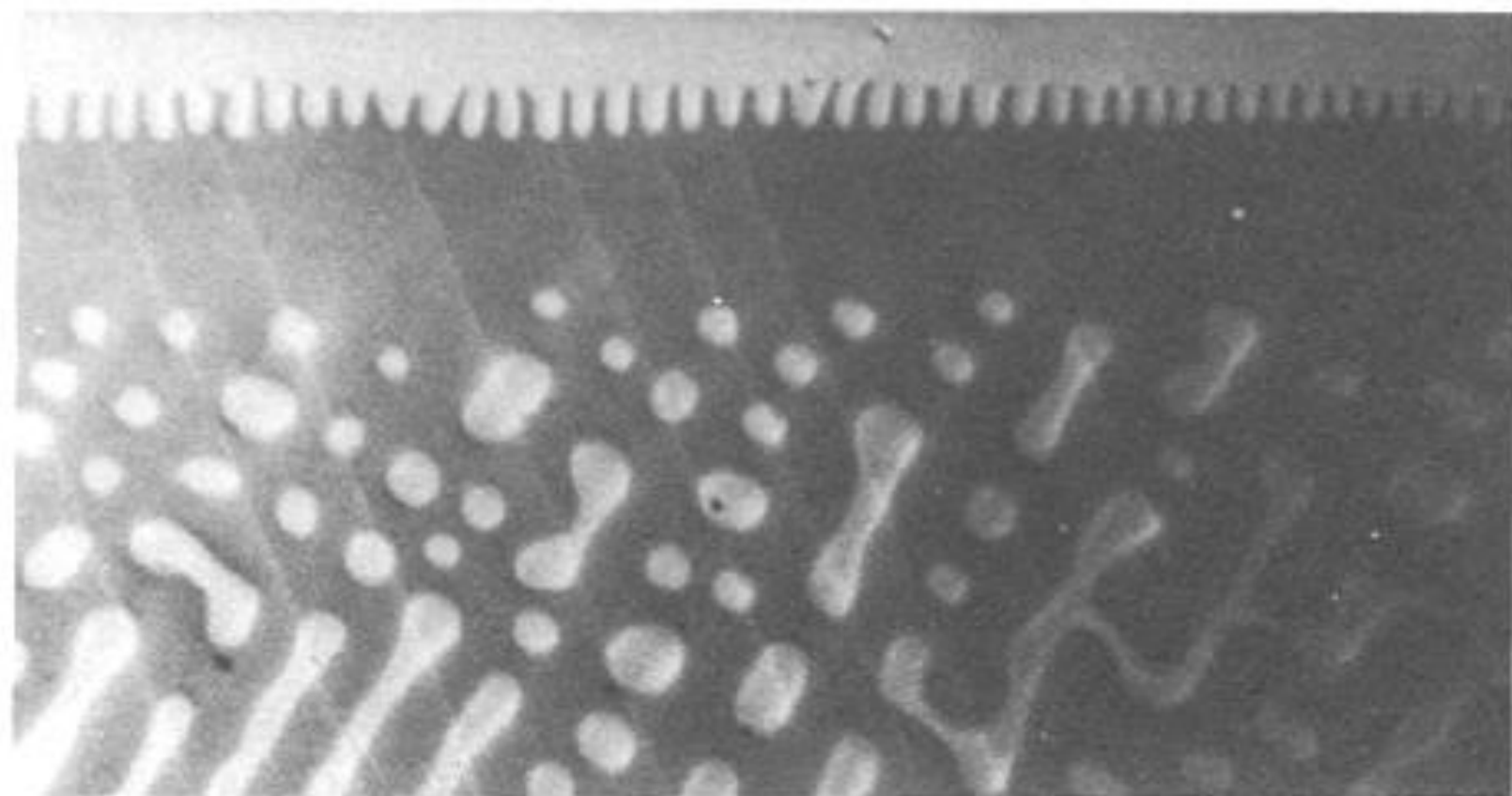


Fig. 4. Superconducting domains (dark) in mercury with $106 \mu\text{m}$ thickness (sample M62). (a) $H = 262 \text{ G}$, decreased monotonically from just below H_c . (b) $H = 284 \text{ G}$, increased monotonically from zero.



103 G

200 μm

Fig. 8. Intermediate state structure at the specimen edge in mercury with 106 μm thickness (sample M62) at 103 G. H was increased monotonically from zero. Normal phase is bright.