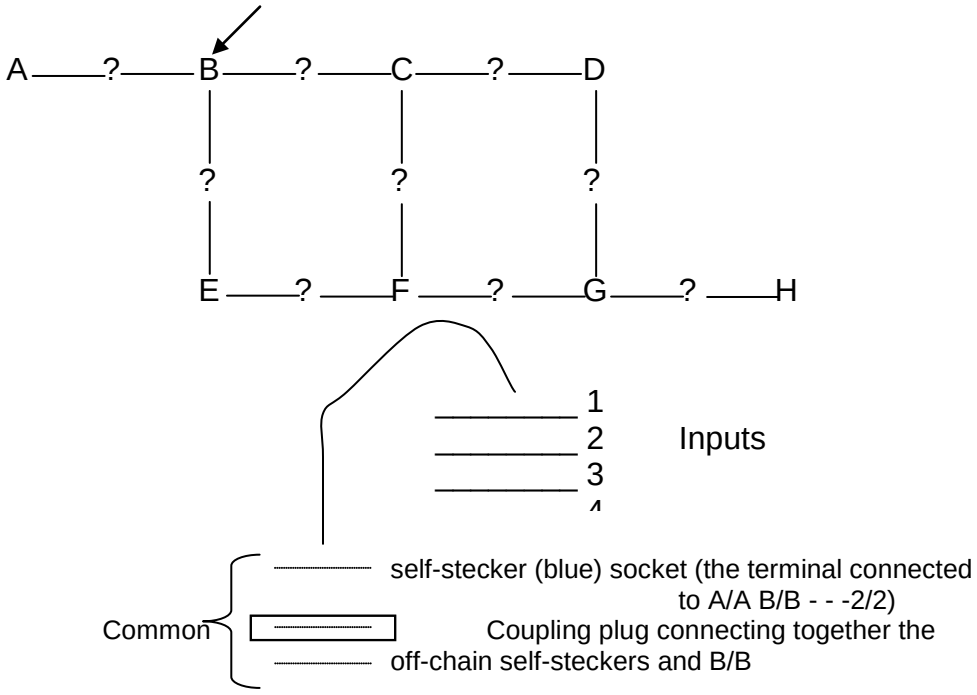
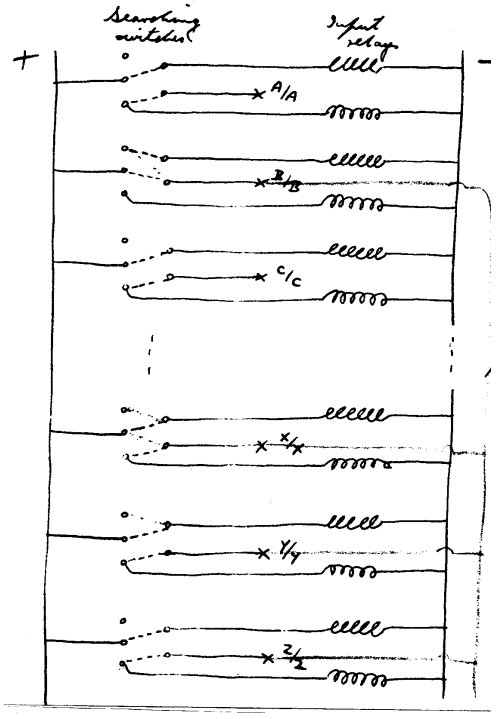
"One self-stecker" sensing

Single Input (first method)



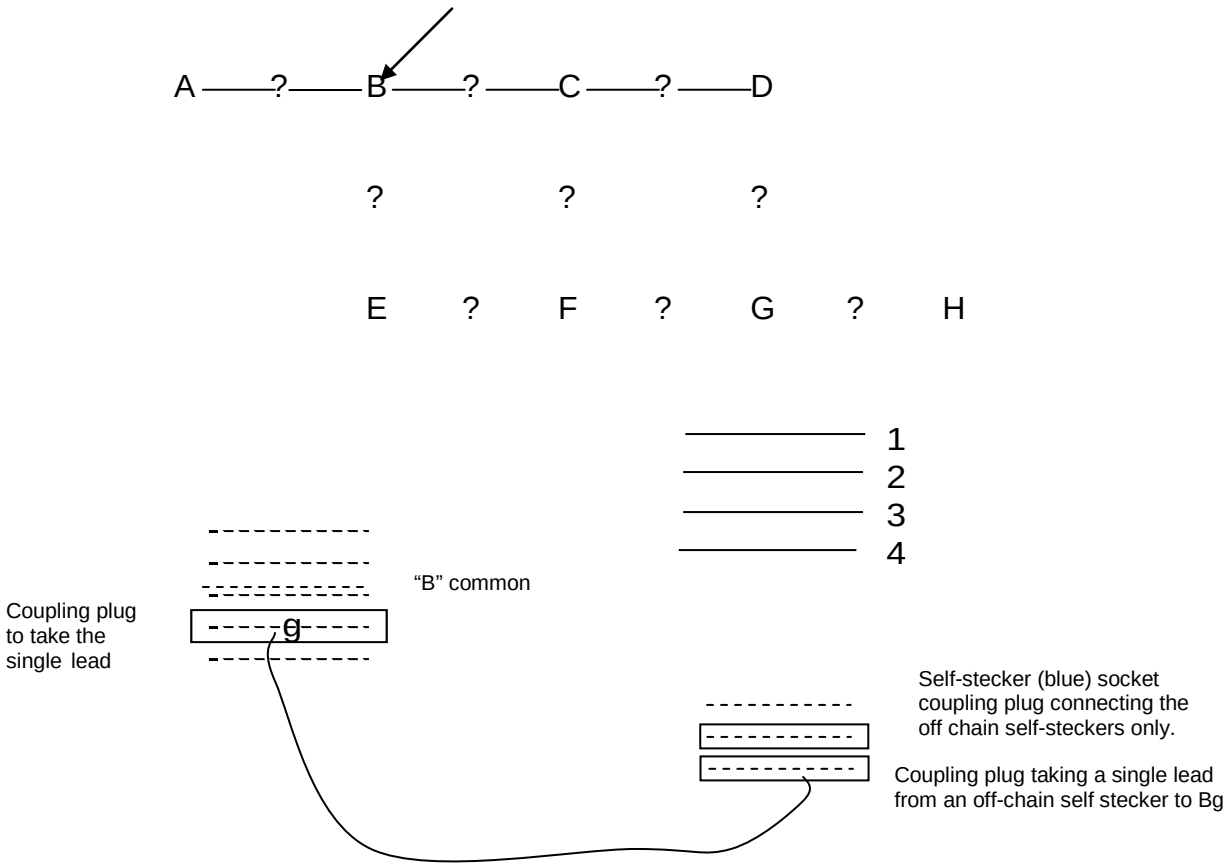
Input plugged to the self-stecker socket. Coupling plug put in the common attached to this socket with the off-chain and input self-stecker shorted together – i.e. 1/1 J/J - - - - 2/2 and B/B. Searching switch B on.



The relay(s) which come up will be the self-steckers on the straight.

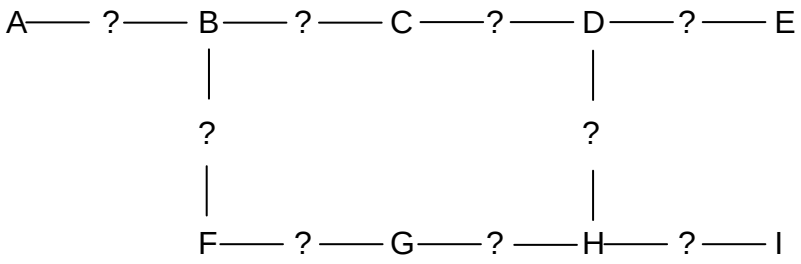
Plugging (coupling plugs)

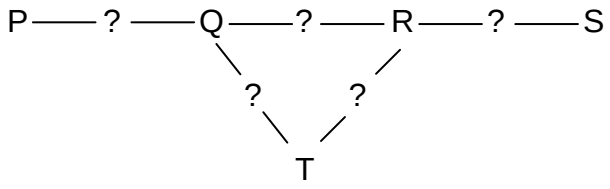
Single input [second method]

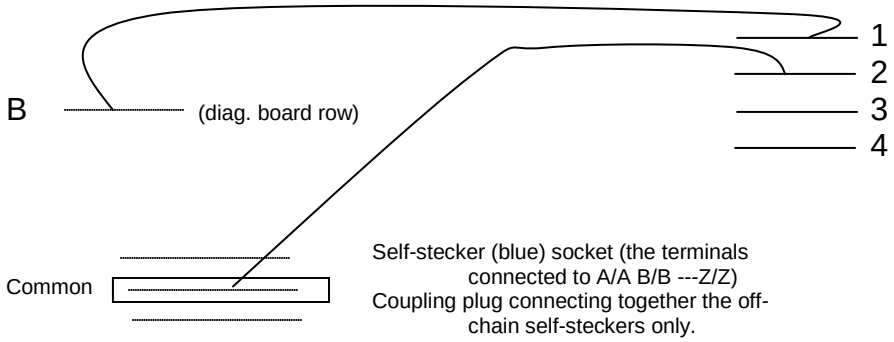


Input plugged to the self-stecker socket. Coupling plug put in the common attached to this socket with the off-chain self-steckers shorted out. Searching switch on for an off-chain letter. Searching on the menu at a cross-stecker by a trailing lead.

Double input (giving Single Input stops)





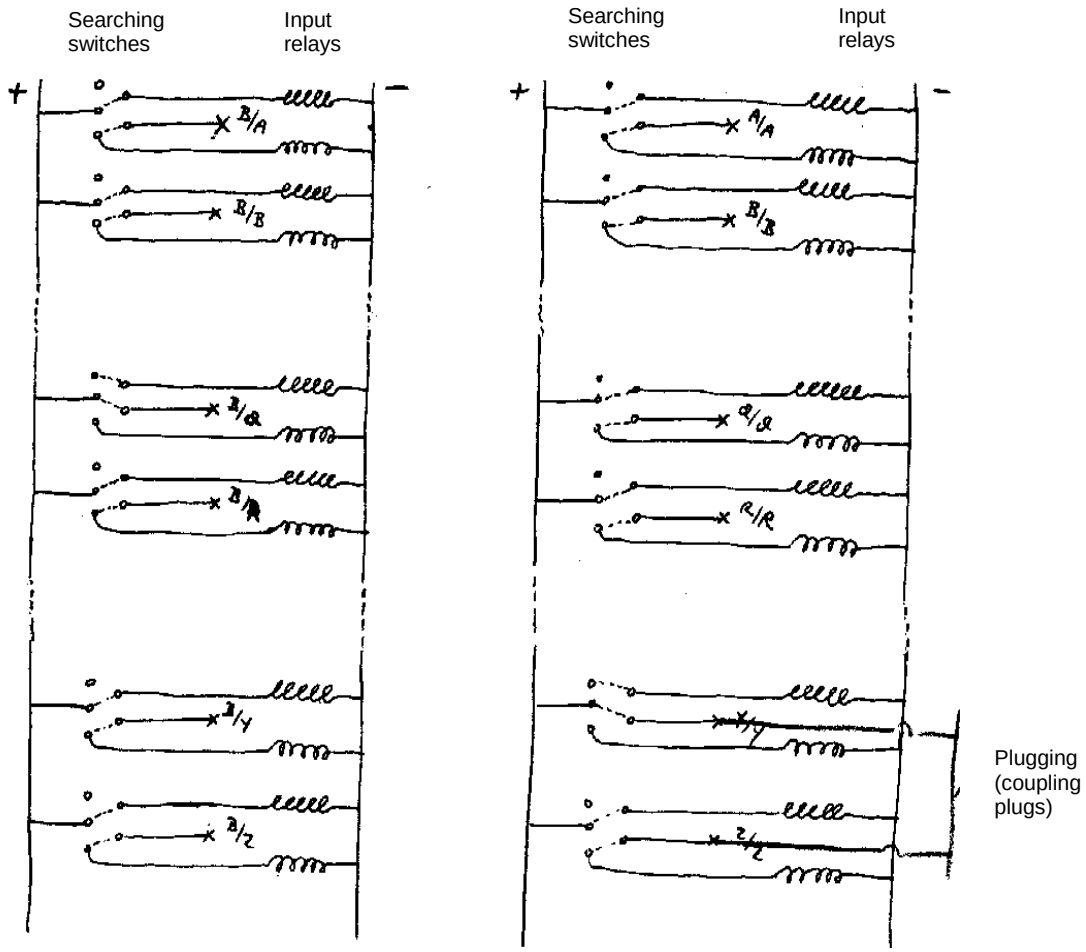


Main input plugged to the input letter as usual. Second input plugged to the self-stecker socket. Coupling plug put in the common attached to this socket with the off-chain self-steckers (only) shorted together, i.e. J/J - - -Z/Z. Main input: searching switch ϑ on; subsidiary input: searching switch γ on (i.e. one of the off-chain self-steckers).

The relays which come up are:

Main chain – stecker of B (as usual)

Subsid. Chain – self-stecker (s) on the straight.



Main Input Subsidiary Input

N.B. The Single Input method can be done on 3 banks of the machines. The Double Input method, of course, can only be done on 2 banks, and the fourth input relay has to be found by feeling the fourth row of relays since it does not appear on the recording panel. It is not good to search on a self-stecker (as for single input), particularly on a long menu. So for menus of more than 12 enigmas, (which will only go on twice anyway), the double input method is usually used – even on one chain. This enables cross-searching to be done.

O.H.L.
30/8/43

P.S. At present the only Bombes which can do this sort of menu are Otto, (Ming, Agnus), Kimberlely, Pretoria - & of course Ming and Agnus cannot hop.