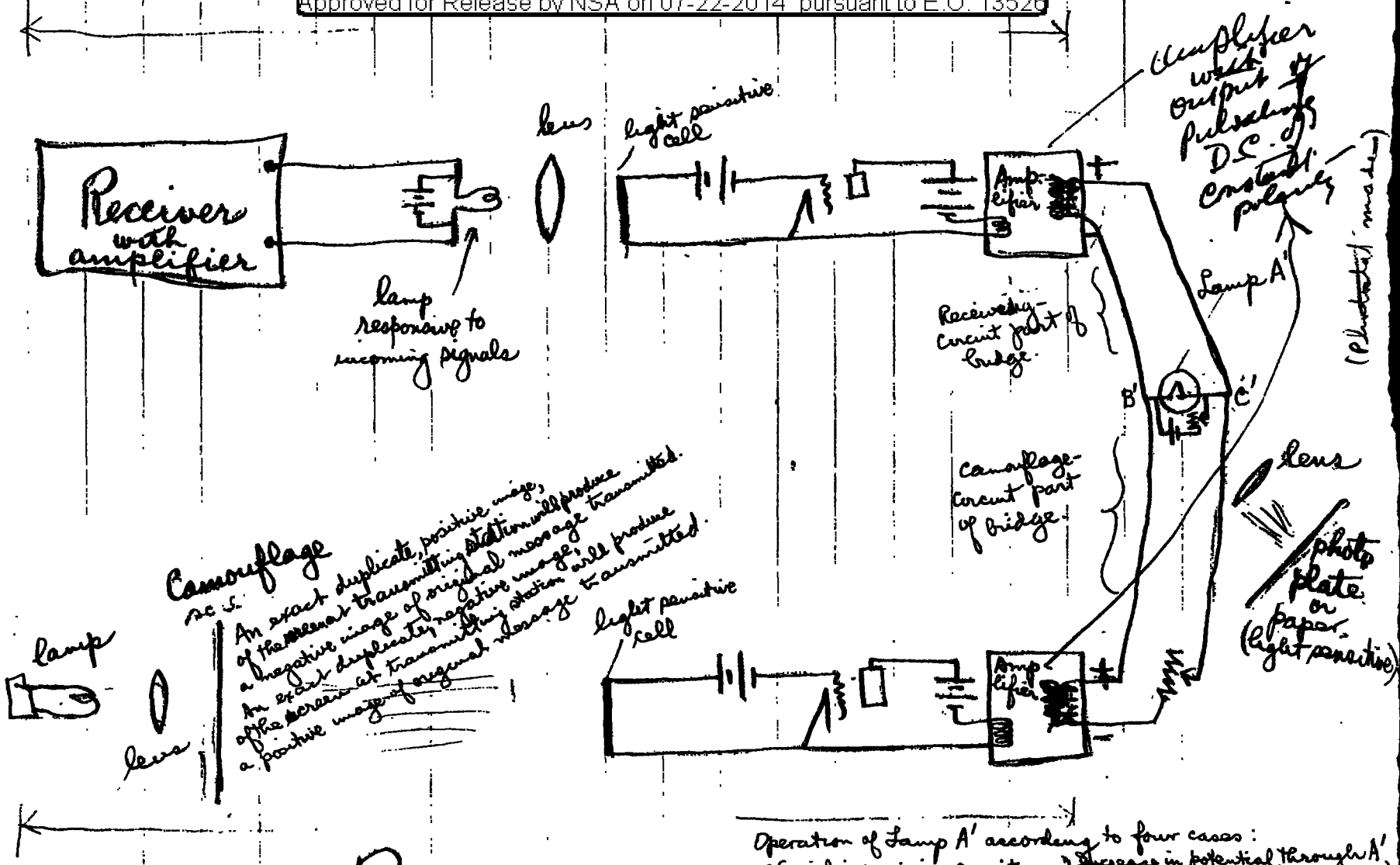


Camouflage
sc. s.
An exact duplicate, positive image, of the scene at transmitting station will produce a negative image of original message transmitted. An exact duplicate negative image of the scene at transmitting station will produce a positive image of original message transmitted.

Receiving Station

William F. Friedman } Inventors
Joseph Mauborgne }
Disclosed to us this 25th of Jan 1926 at Washington, D.C.
Geo. O. Hoppenyan
Paul S. Edwards

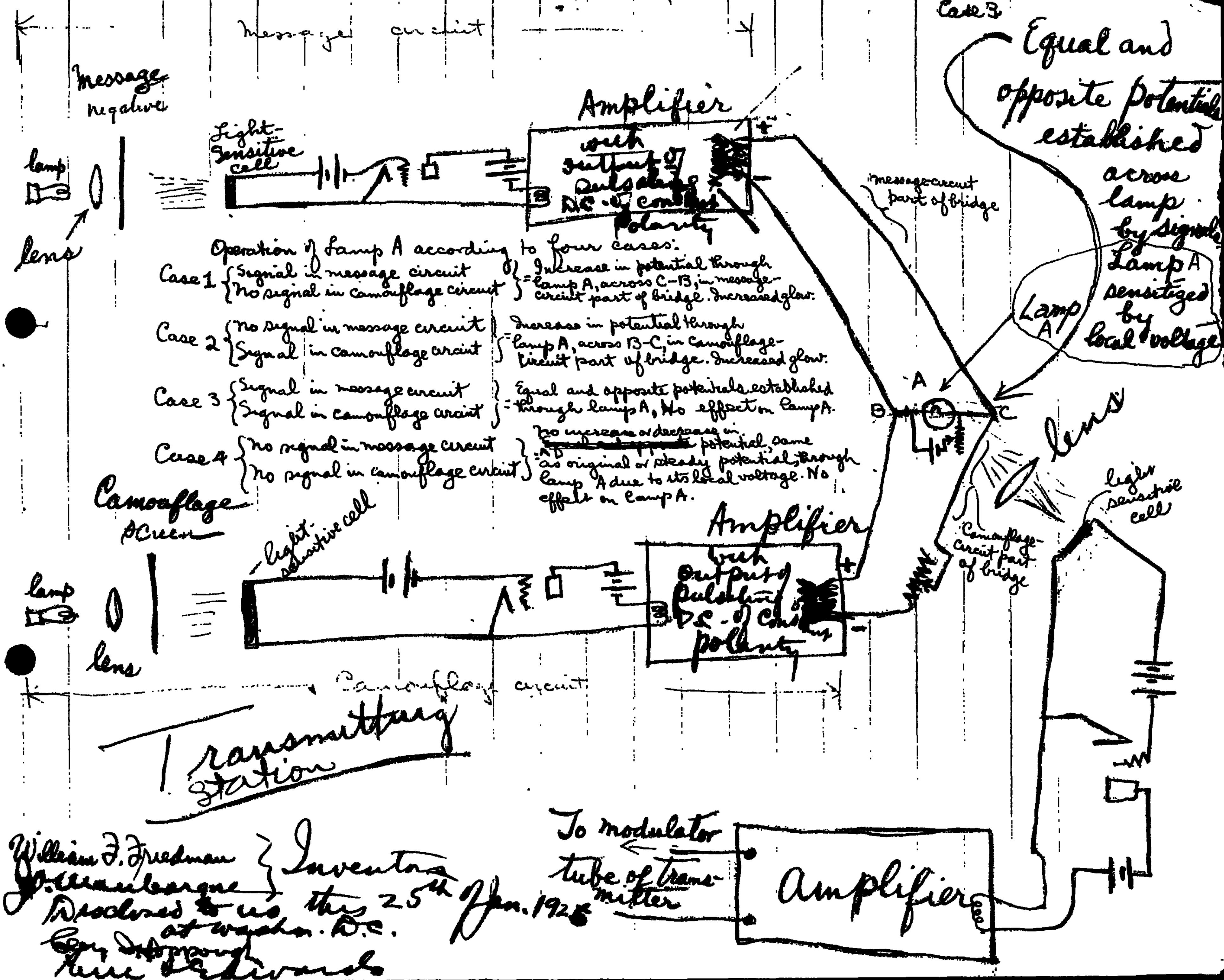
Operation of Lamp A' according to four cases:

Case 1 { Signal in receiving circuit / No signal in camouflage circuit } Increase in potential through A', across C'–B' in receiving-circuit part of bridge. Increased glow.

Case 2 { No signal in receiving circuit / Signal in camouflage circuit } Increase in potential through A' across B'–C' in camouflage-circuit part of bridge. Increased glow.

Case 3 { Signal in receiving circuit / Signal in camouflage circuit } Equal and opposite potentials established through Lamp A'. No effect on glow.

Case 4 { No signal in receiving circuit / No signal in camouflage circuit } No effect on Lamp A'.


Message circuit
Message negative
lamp
lens
Light-sensitive cell
Amplifier
with output of pulsating D.C. of constant polarity
+
-
B
message-circuit part of bridge
Case 3
Equal and opposite potentials established across lamp by signals
Lamp A sensitized by local voltage
Lamp A
A
B
C
lens
light sensitive cell
Camouflage-circuit part of bridge
Camouflage screen
lamp
lens
light-sensitive cell
Amplifier
with output of pulsating D.C. of constant polarity
Camouflage circuit
To modulator tube of transmitter
Amplifier
Transmitting Station

Operation of Lamp A according to four cases:

Case 1 {Signal in message circuit / No signal in camouflage circuit} = Increase in potential through lamp A, across C-B, in message-circuit part of bridge. Increased glow.

Case 2 {No signal in message circuit / Signal in camouflage circuit} = Increase in potential through lamp A, across B-C, in camouflage-circuit part of bridge. Increased glow.

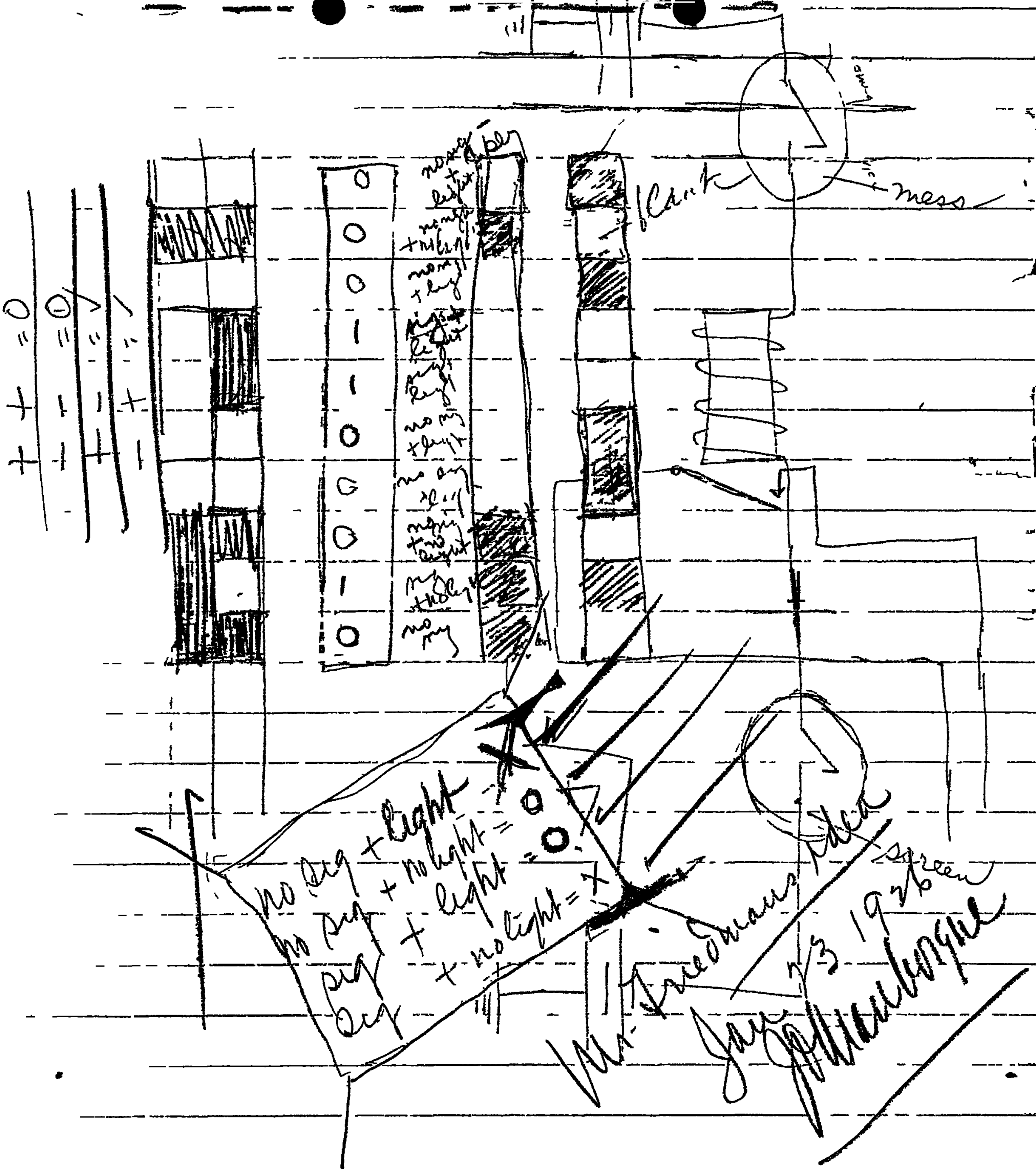
Case 3 {Signal in message circuit / Signal in camouflage circuit} = Equal and opposite potentials established through lamps A, No effect on lamp A.

Case 4 {No signal in message circuit / No signal in camouflage circuit} = No increase or decrease in ~~signal and opposite~~ potential, same as original or steady potential, through lamp A due to its local voltage. No effect on lamp A.

William F. Friedman } Inventors
J. O. Mauborgne }

Disclosed to us this 25th of Jan. 1925 at Washn. D.C.

[illegible]
[illegible]


+ + = 0
- - = 0
+ - = 1
- + = 1
Cart
mess
screen
no sig + light = 0
no sig + no light = 0
sig + light
sig + no light = X
Mr. Friedman's idea