

# **Novel Collecting Techniques for Fireflies and other Bioluminescent Beetles**

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J. Lloyd



M. Branham

# Where are all the fireflies?





Joe Cicero



*Microphotus octarthrus* Fall

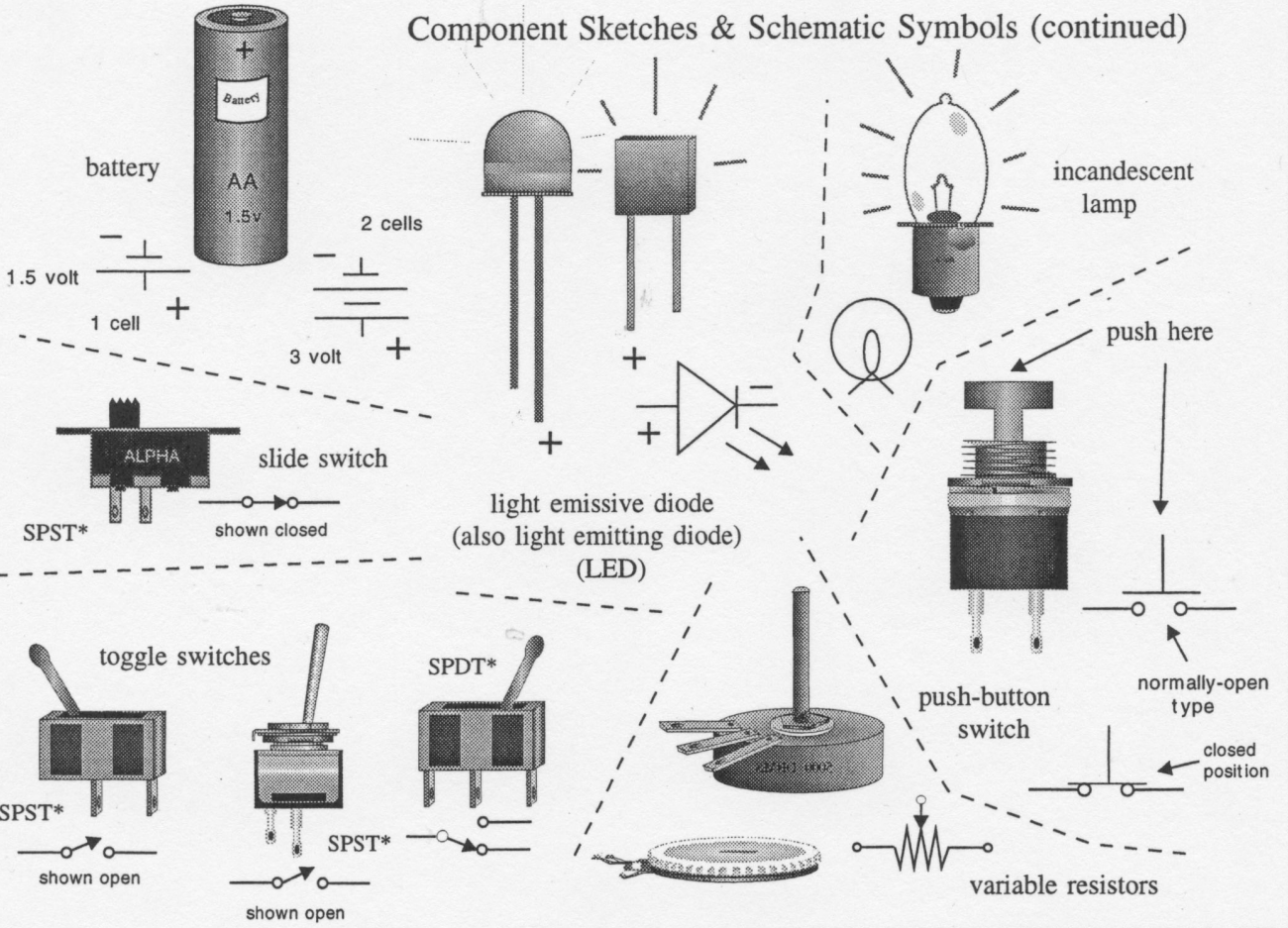


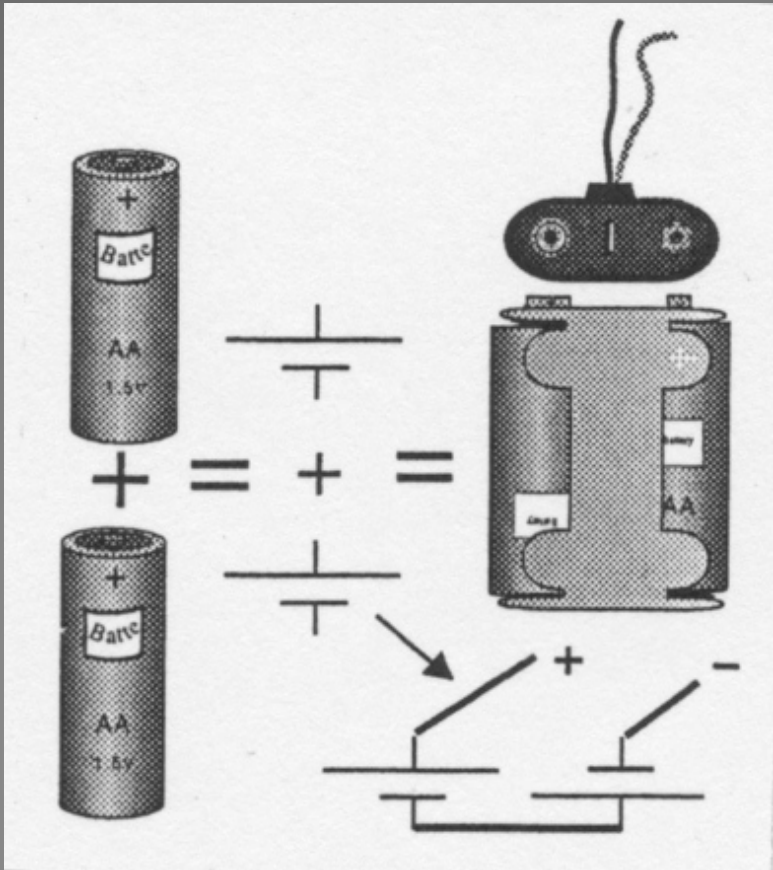
*Pleotomodes needhami* Green

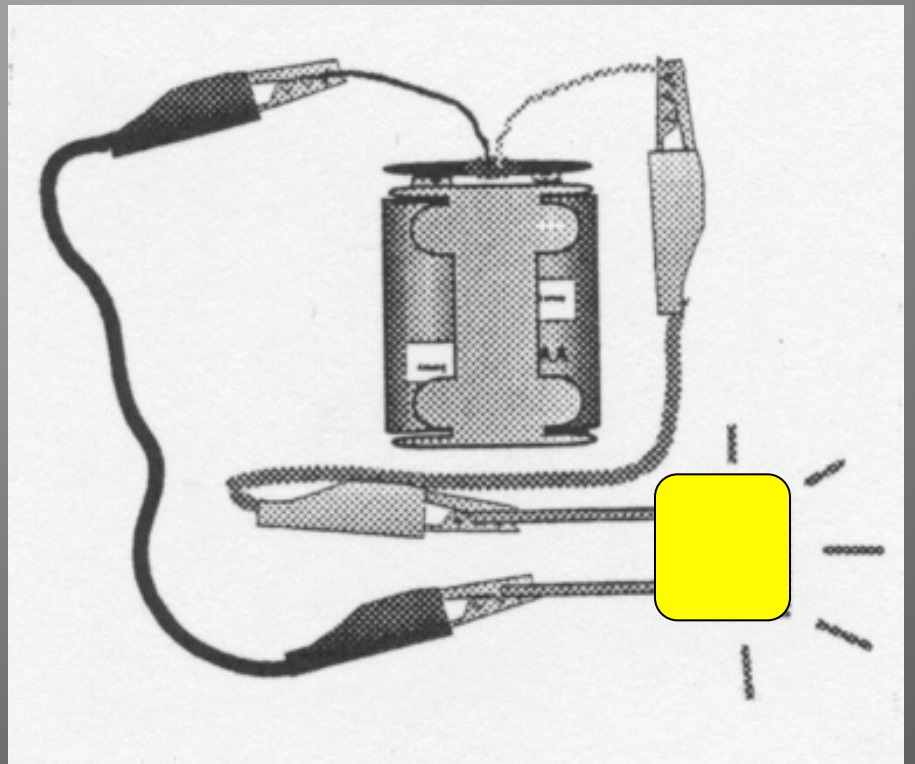
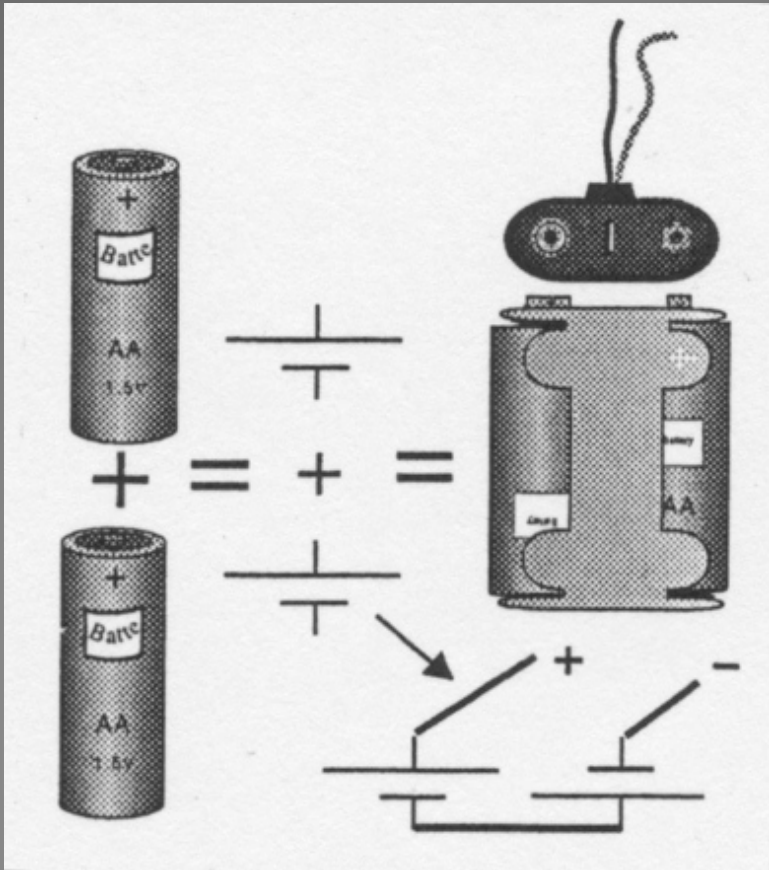


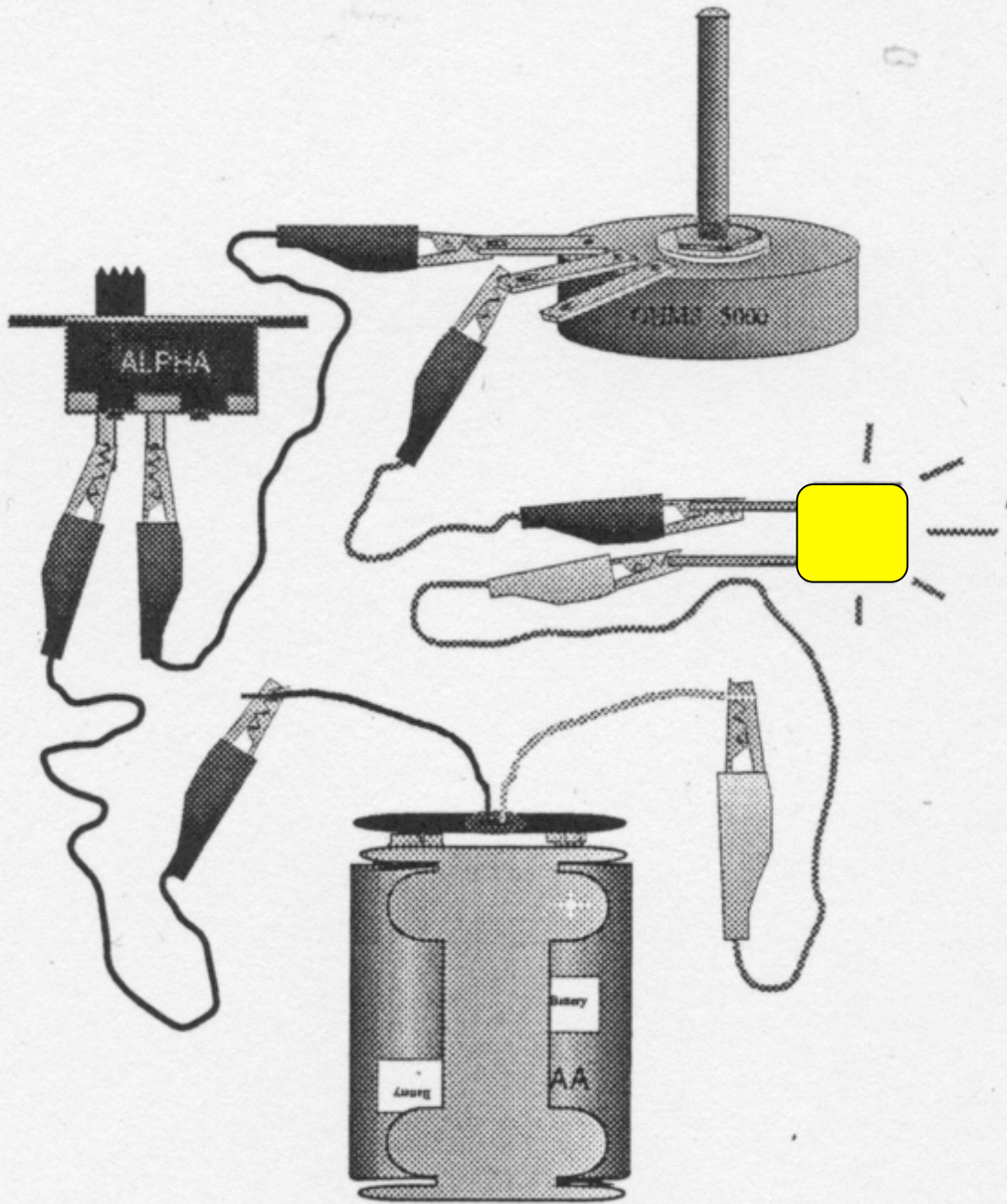


# Component Sketches & Schematic Symbols (continued)

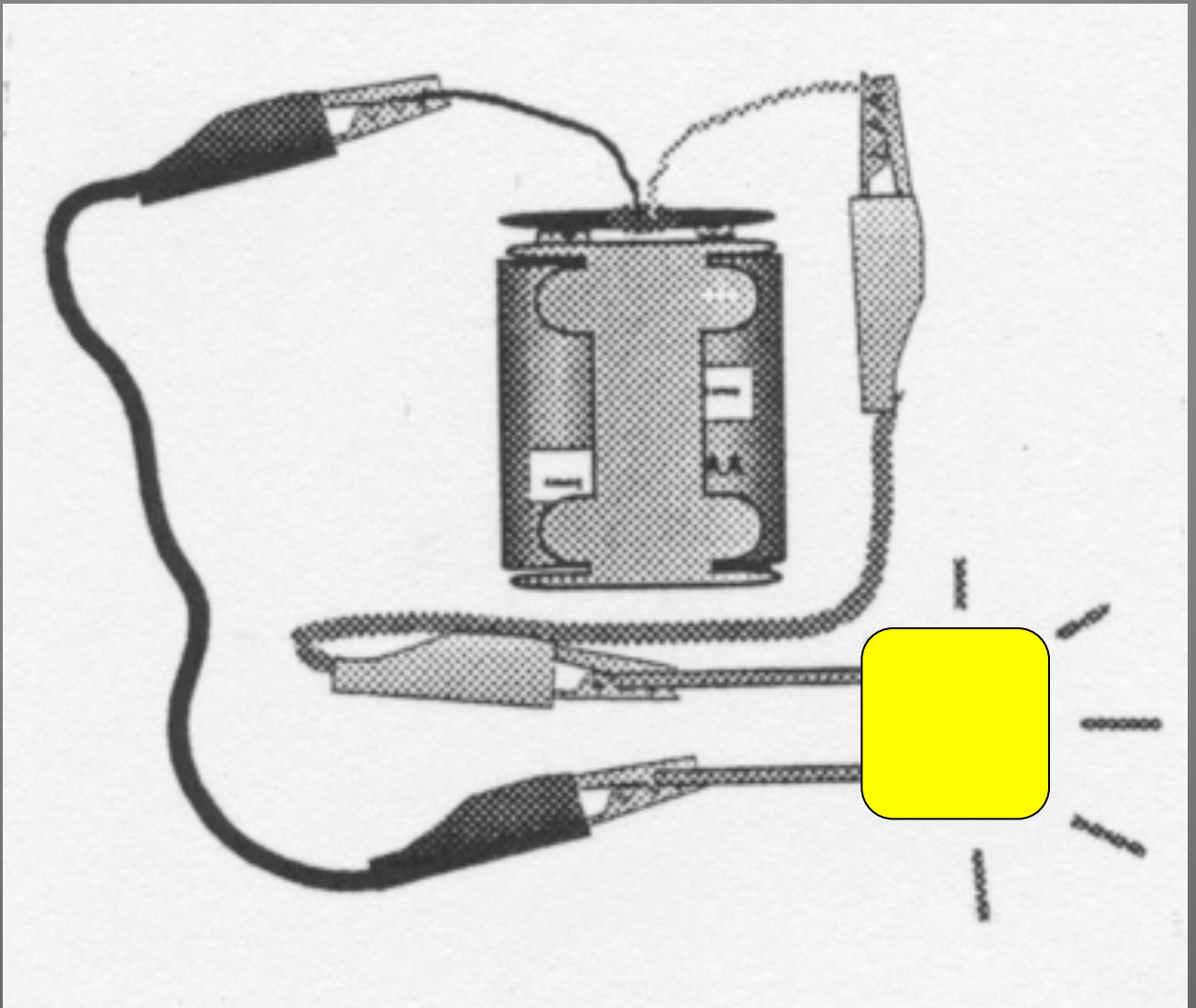








If two 1.5 volt batteries (AA or AAA) are used in series without a resistor, you **must use a 3 volt LED**...







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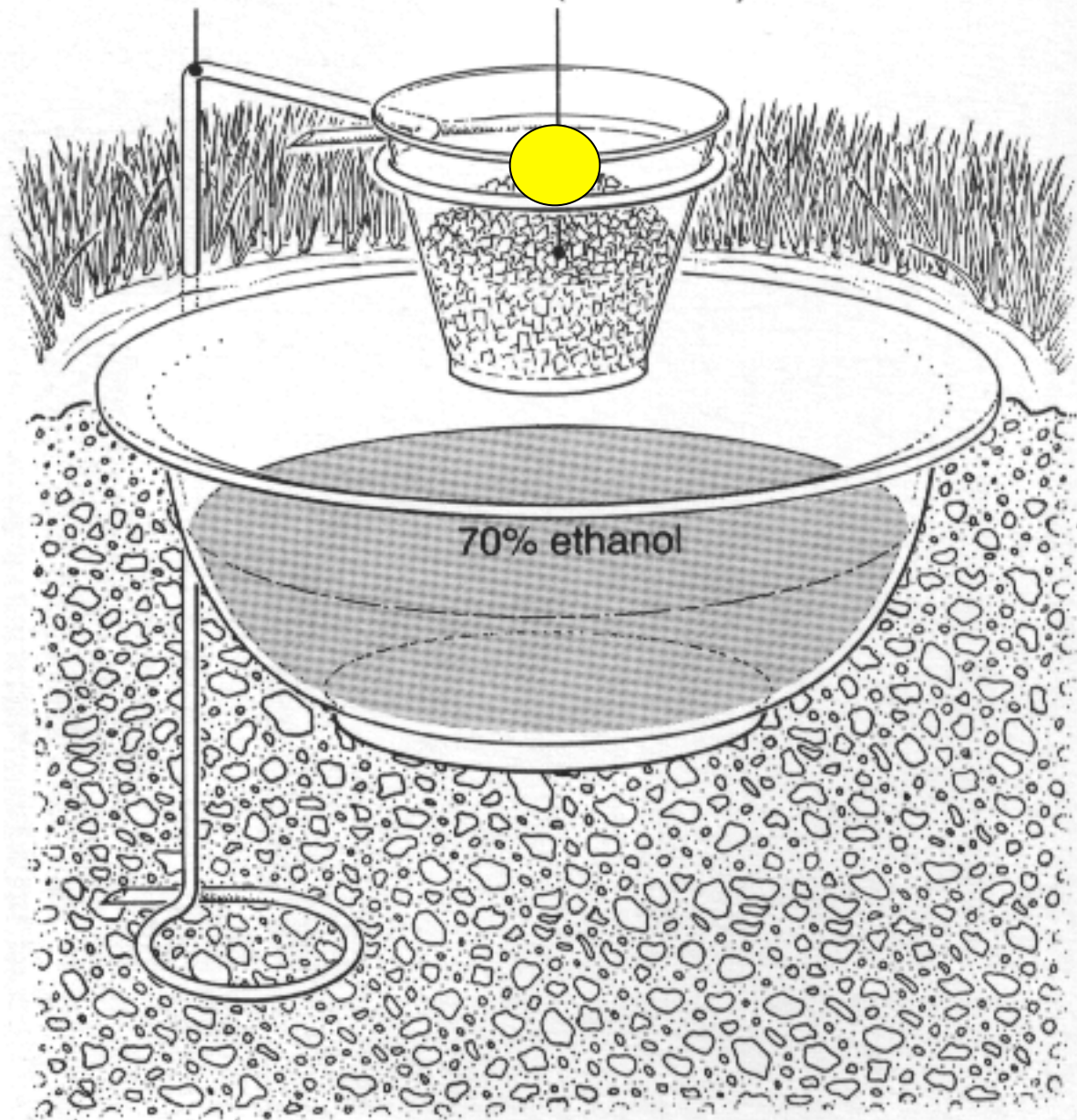




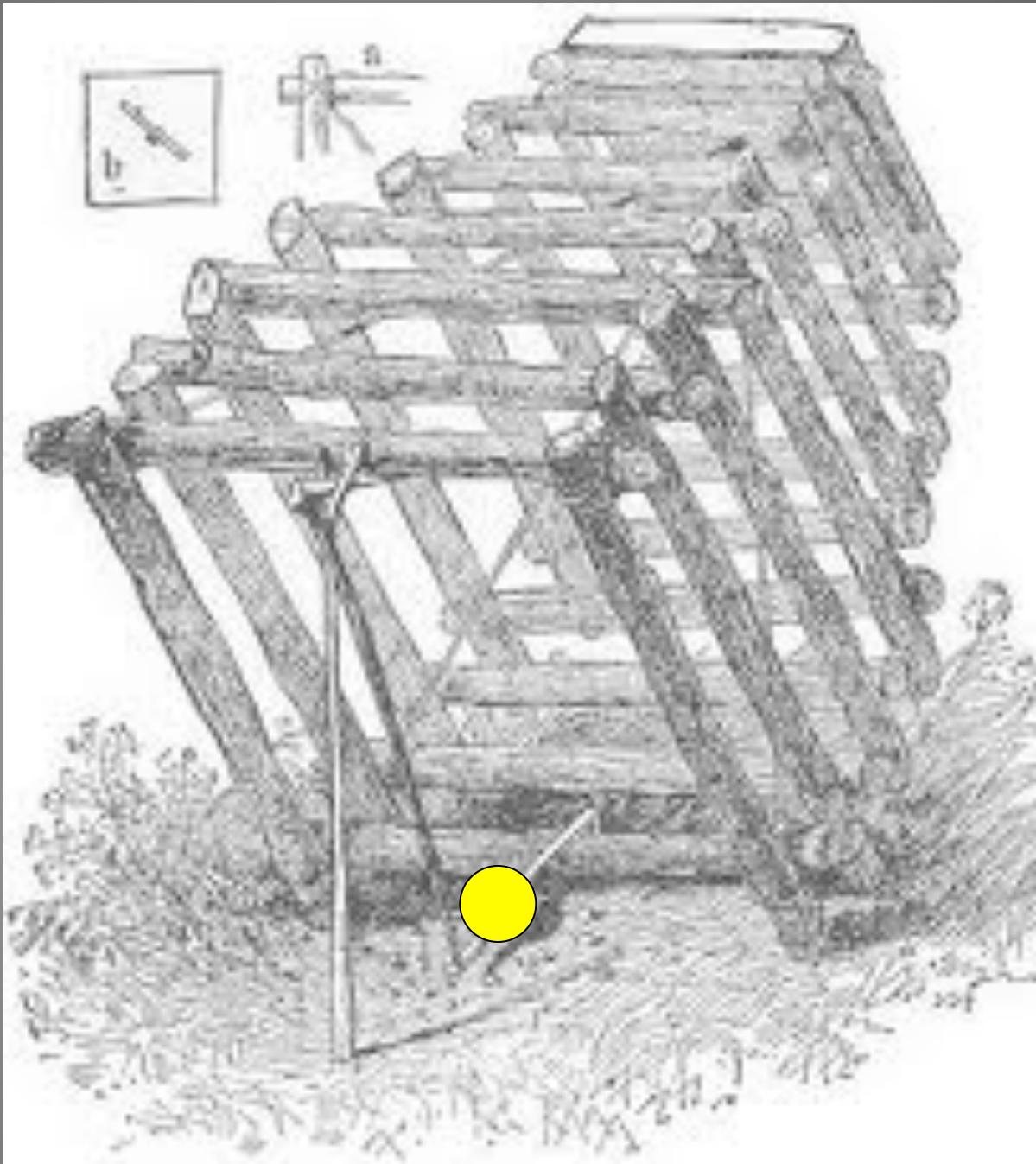


coathanger  
wire

bait  
(attractant)

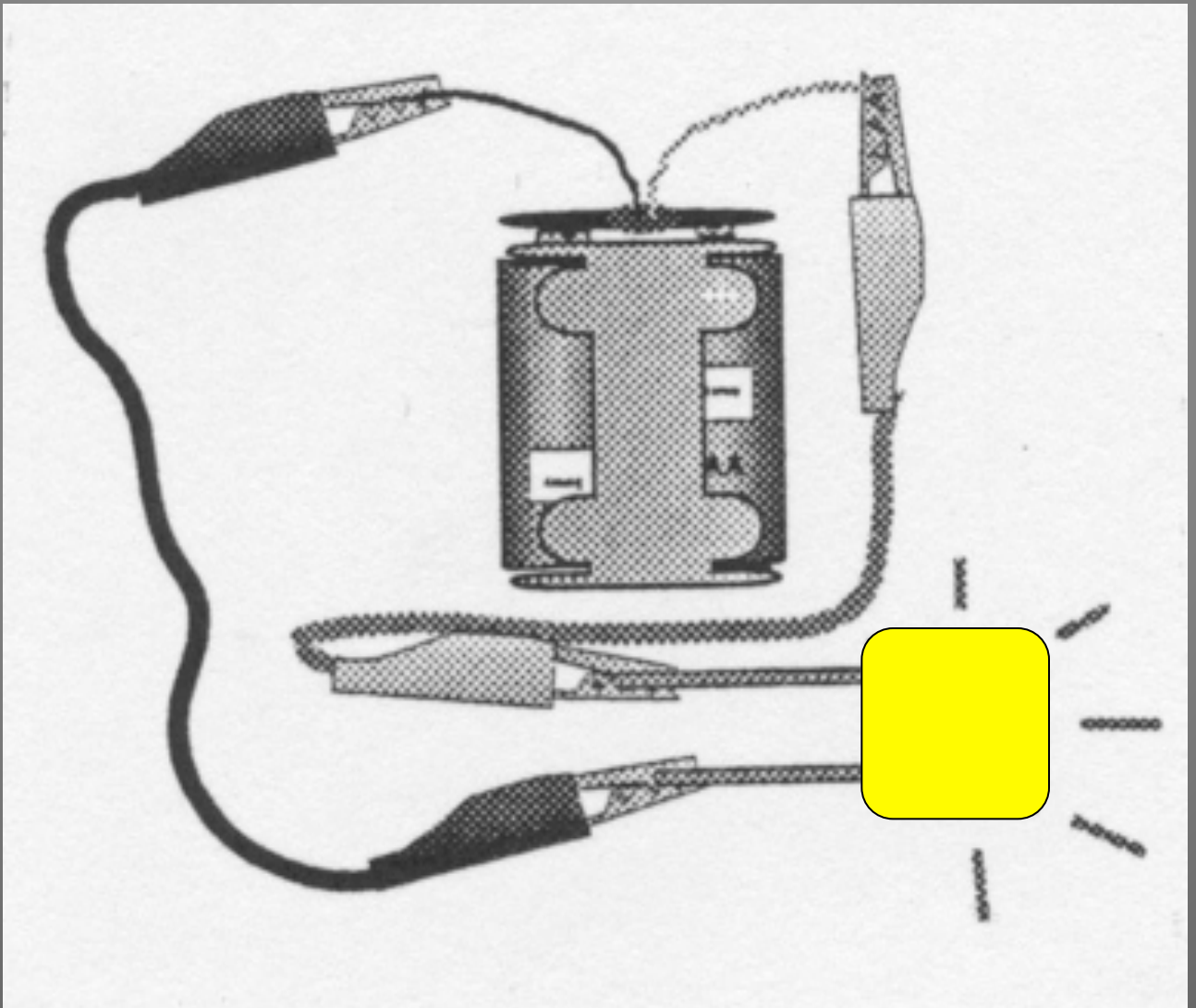








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# Acknowledgements

**James E. Lloyd, Electronics for Fireflyers,  
Course Handout, (Field, Lab and  
Bench 19)**

## Photo Credits:

**Barcroft Media, J. Cremer, G. Kristian,  
James Lloyd, Stephen Marshall, Dan Otte,  
John Tyler**







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J. Tyler



BugGuide.net



*Pleotomus pallens* LeConte

