# Safecracking for Everyone!

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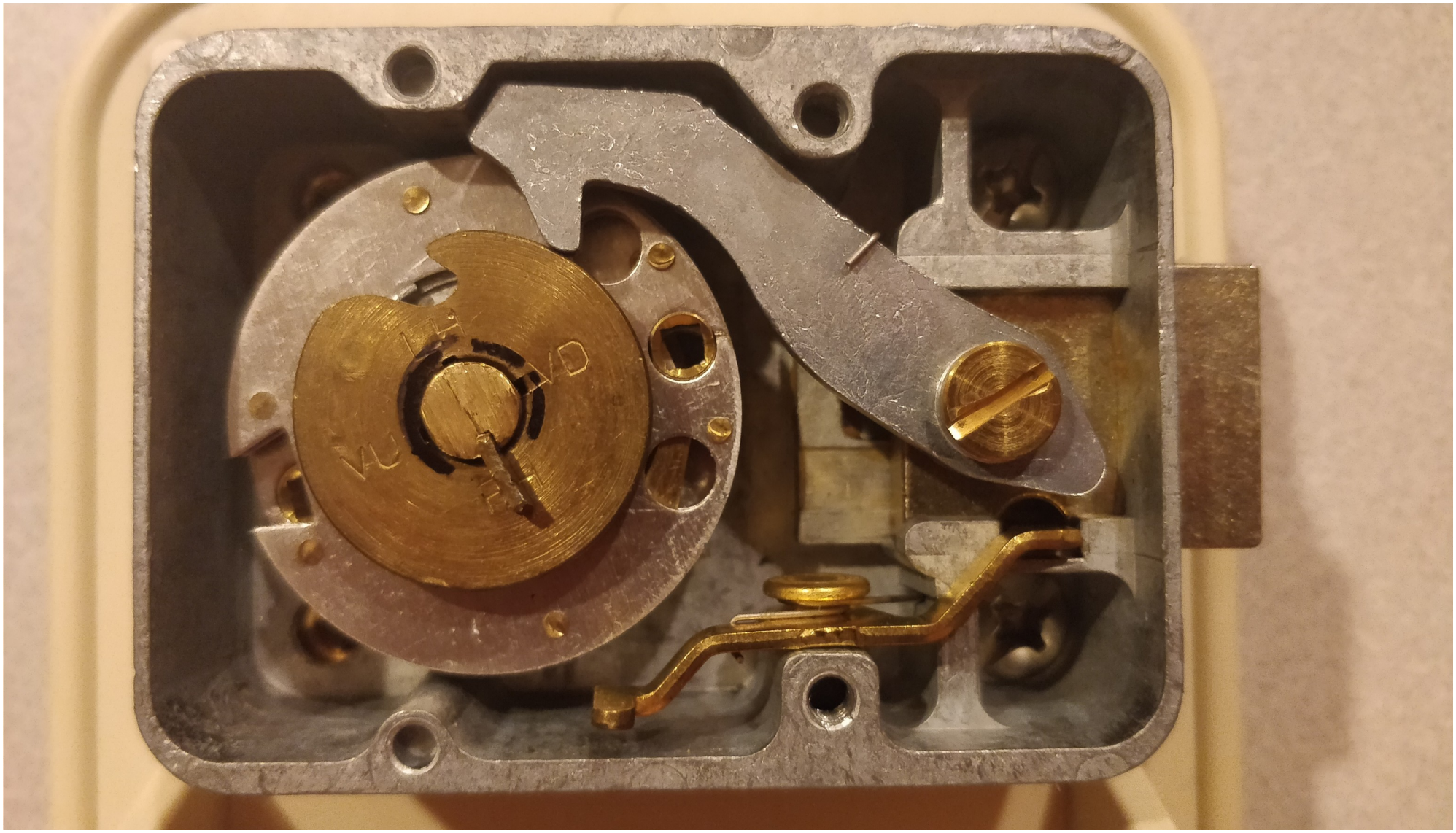
# Who am I?

- Jared Dygert
- Locksport enthusiast
- Gamer
- Rock climber

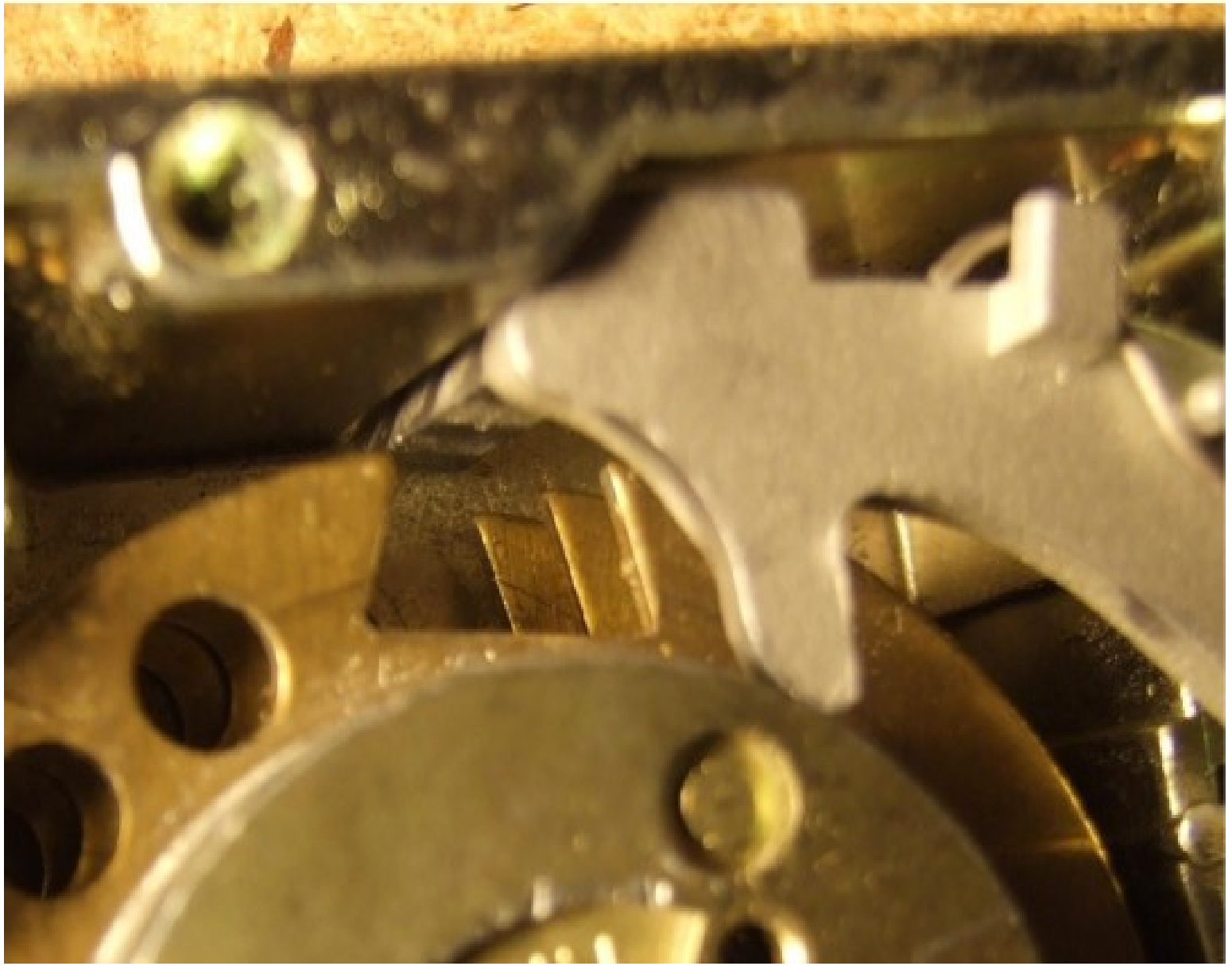
# Talk outline

- How group 2 safe locks works
- The flaws in this design and how to exploit them
- Variations on techniques
- Differences between group 2 safe locks

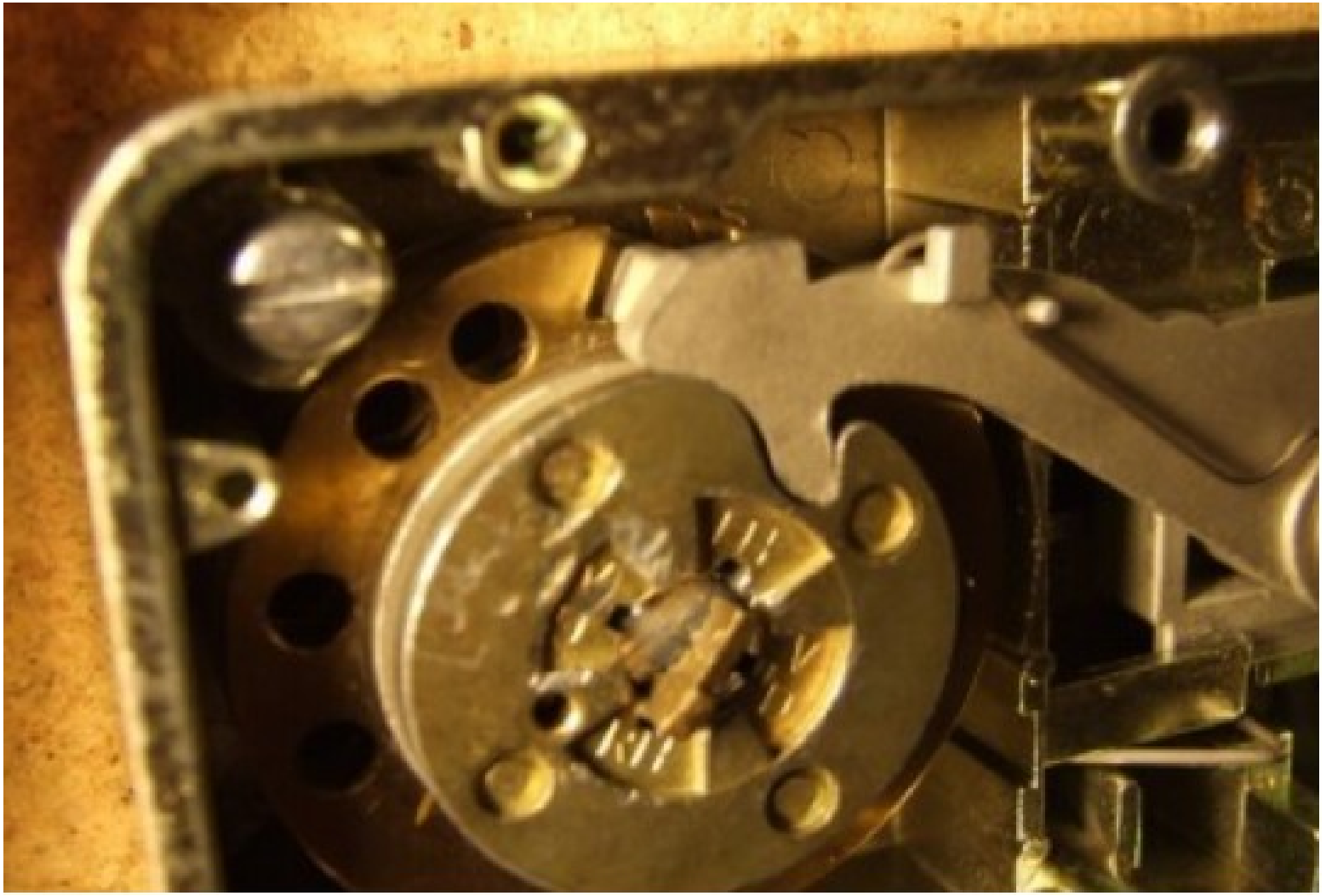
# Parts of a lock



# Dialing the right combination

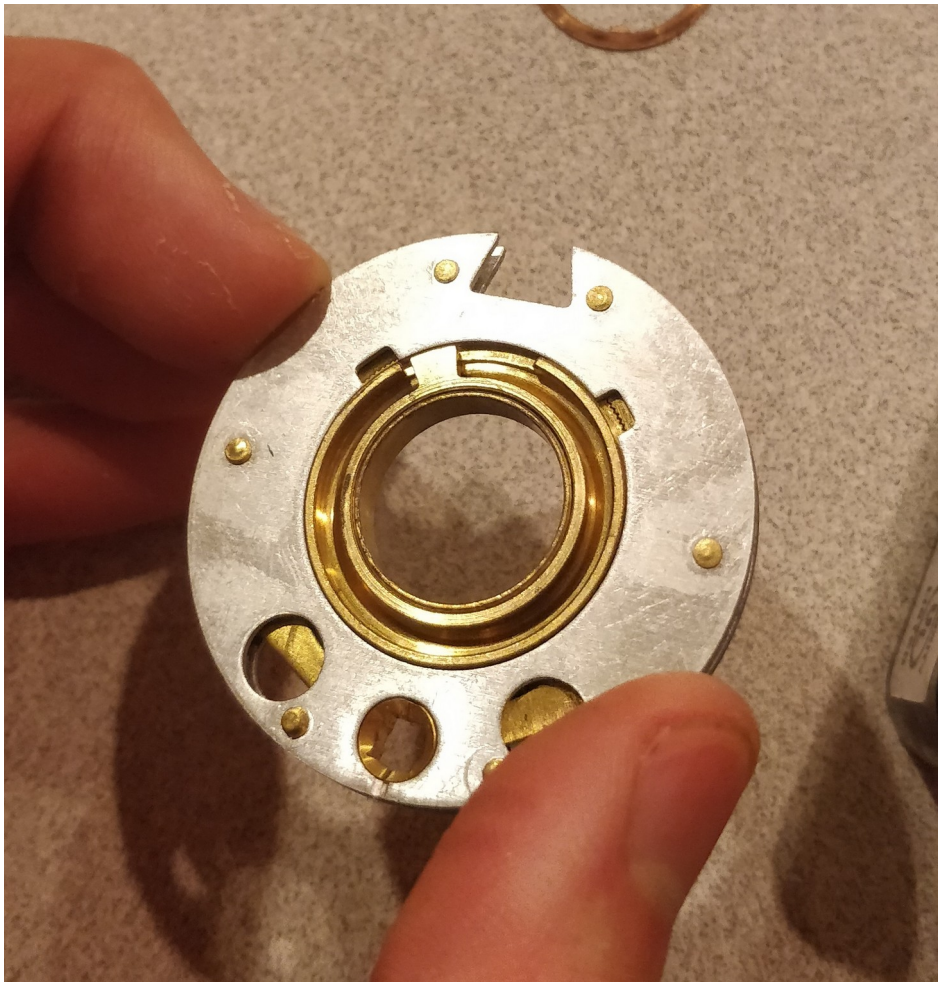


# Open



# How it works





# Vulnerabilities





# Plan of attack

- Get common low point
- Isolate 3rd wheel
- Look for gate signature
- Find center of gate
- Repeat for 2nd wheel
- Brute force 1st wheel

# Finding common low point

- Pick up all wheels with right rotation
- Right rotation because the 3rd wheel is set with left rotation
- Take contact point readings every 10th increment
- Park 1st and 2nd wheels on lowest reading
- Gets 1st and 2nd wheels out of the way

# Isolate the 3rd wheel

- Spin left one full rotation to pick up 3rd wheel
- Start 2 increments left of common low point
- Start taking contact point readings every 2 increments
- Find center of gate indication
- If no gate indication then use lowest point to help unmask other wheels

# Isolate the 2nd wheel

- Set 1st wheel on low point with left rotation
- 2nd wheel 2 increments left of common low point
- 3rd wheel to gate or lowest point
- Take contact point reading
- Move 2nd wheel by turning right to 3rd wheel and keep going to 2nd wheel. No need to reset 1st wheel
- Find center of gate or lowest point

# Bruteforce 1st wheel

- Dial 0 - 2nd # - 3rd # then 2 - 2nd # - 3rd #, 4 - 2nd # - 3rd #, etc
- Keep track of lowest point/gate indications in case lock doesn’t open
- If lock doesn’t open, repeat isolating each wheel but with other wheels on their respective lowest point

# Different group 2 locks

- LaGard 3330
  - Oval wheels
  - Identify hills/high points, isolate each wheel through each hill, 25 increments off hill is each wheel’s individual low point (no common low point)
- Diebold
  - U shaped drive cam
  - Take left contact point readings instead of right
- S&G 6730 vs 6741
  - Dialing tolerance
  - 6741 allows for a bit more slop

# Final tips

- Be precise in dialing
- Read from same angle
- Read contact point with same amount of force (the less the better)
- Try with a known combination
- Remove back cover
- If all else fails, buy my book!



# Additional resources

- Safecracking for Everyone on Amazon
- Safecracking for Everyone on Youtube with link to free pdf of the book (OLD!)
- r/lockpicking, LPU discord, keypicking discord
- Practice
- Sophie’s Safecracking Simulator

https://drive.google.com/file/d/1Lf3mYl6wz6h6MEBLYNOyn68-KErXwGJV/view?usp=drive_link

