

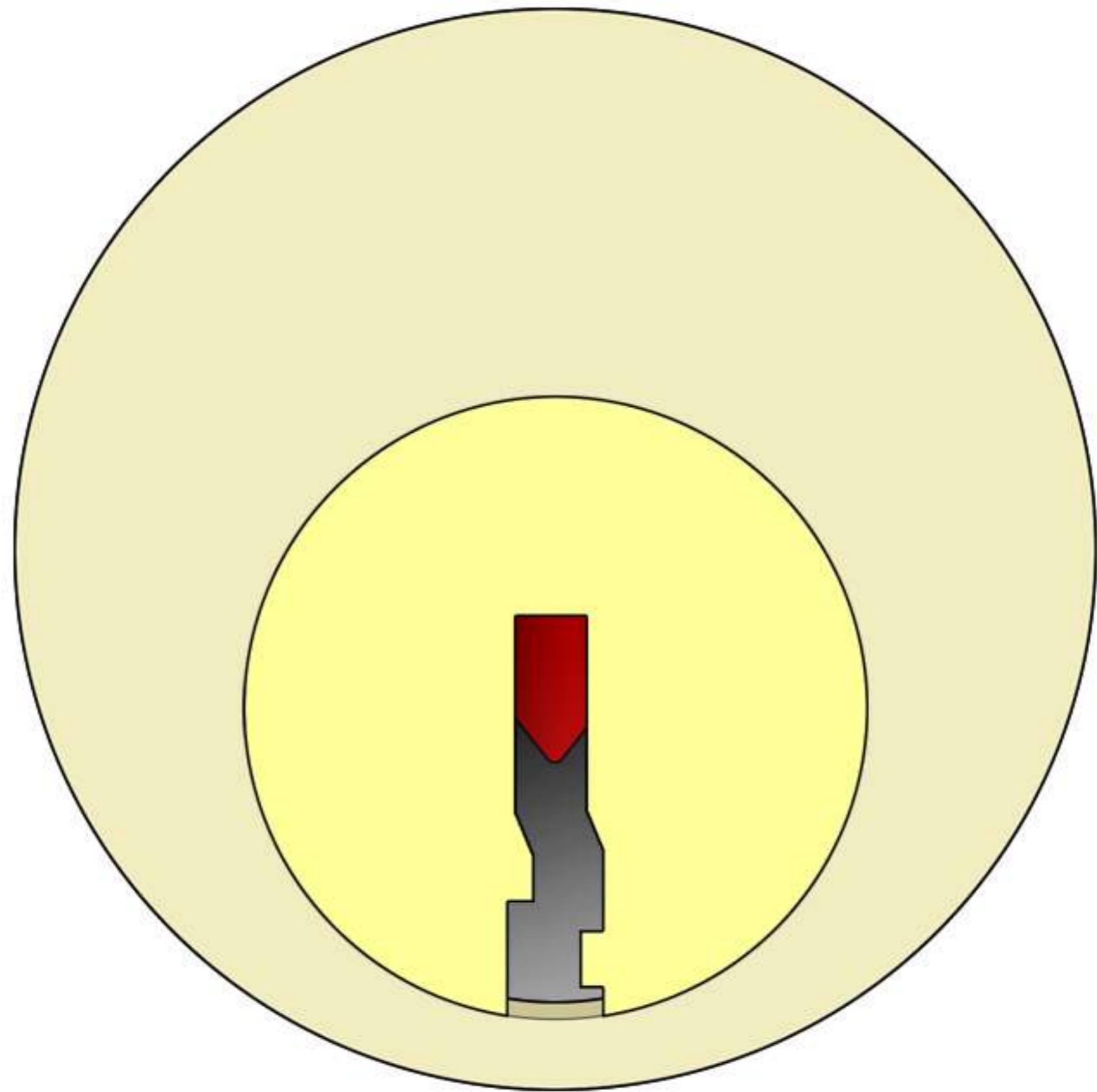
DE|NDE of locks

Consumer edition

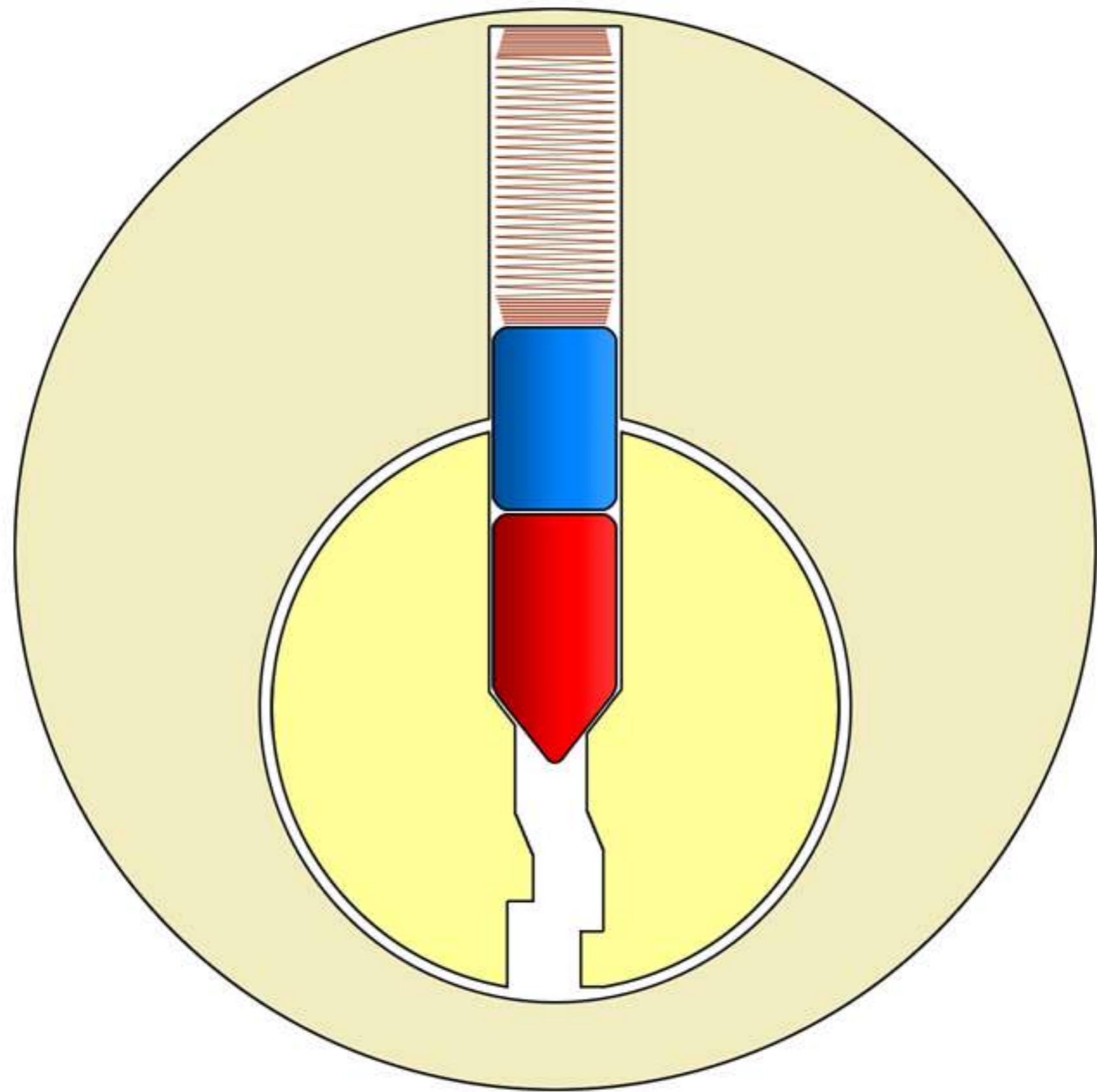
Simon Pascal Klein

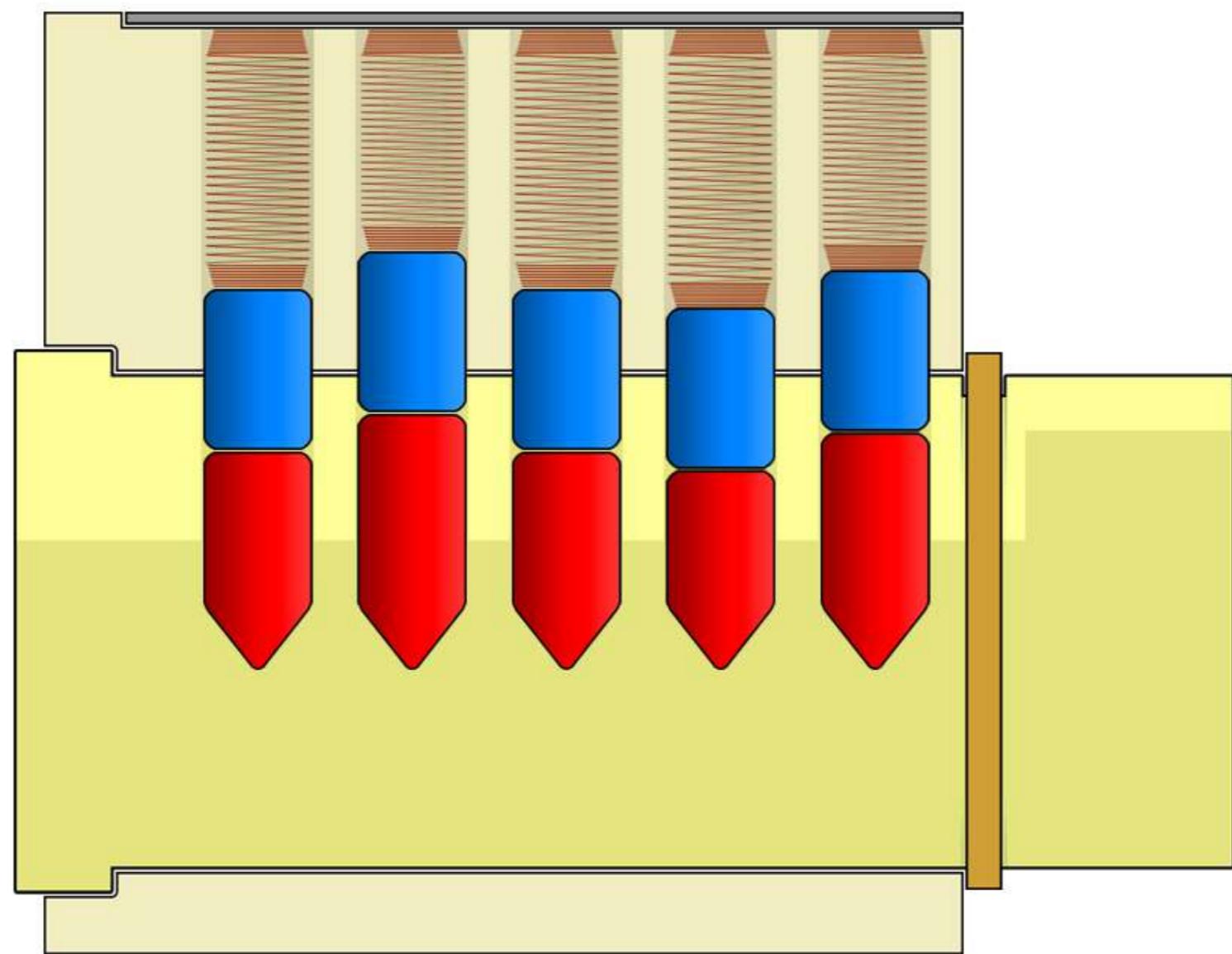
- klepas@klepas.org
- @klepas

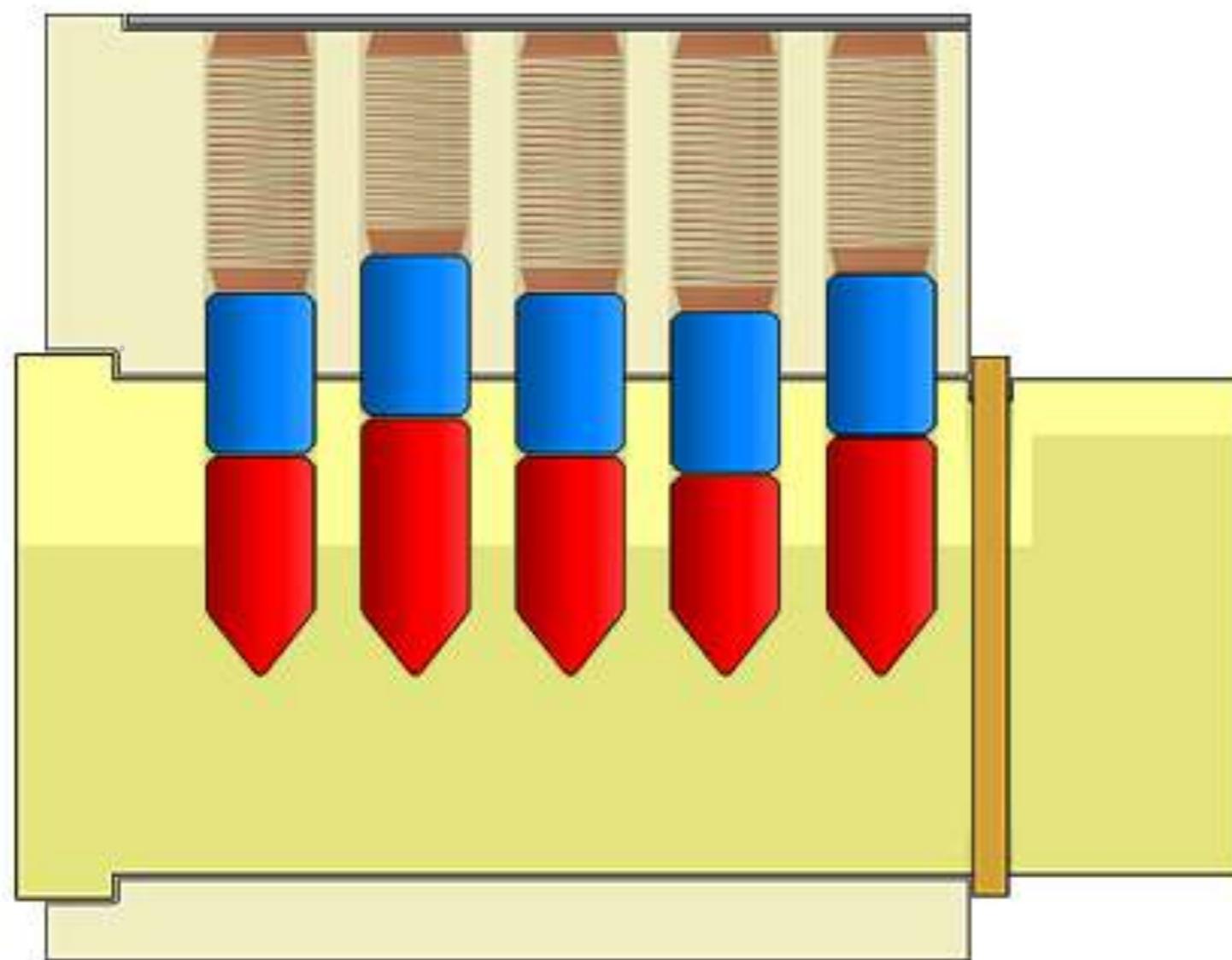
pin tumbler lock
design

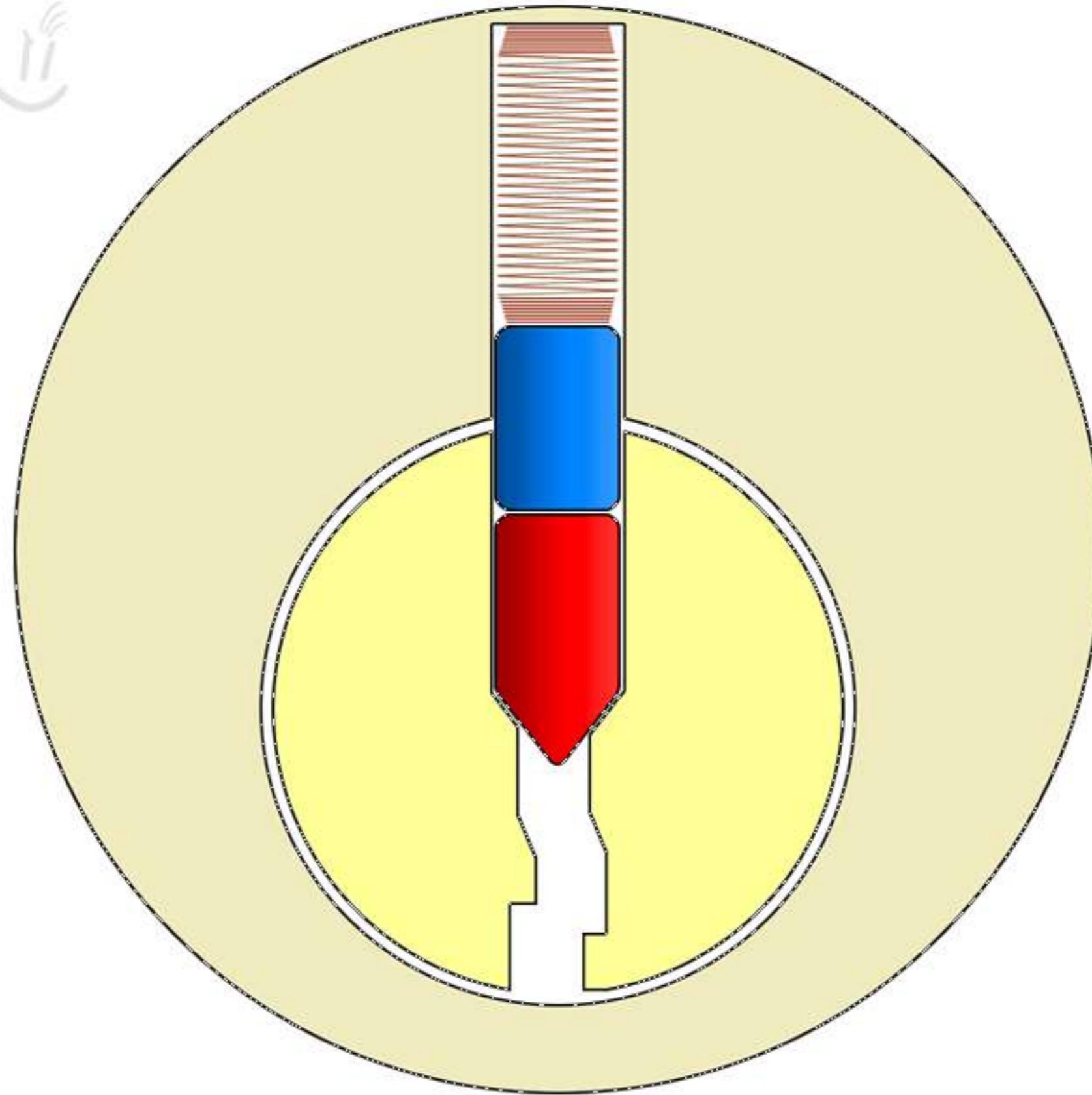












</revision>

<attacking>

destructive entry

(DE)

options...

bolt-cutter

angle-grinder

drill

torch

crowbar/similar

hammer

screwdriver*

file*

non-destructive entry

(NDE)

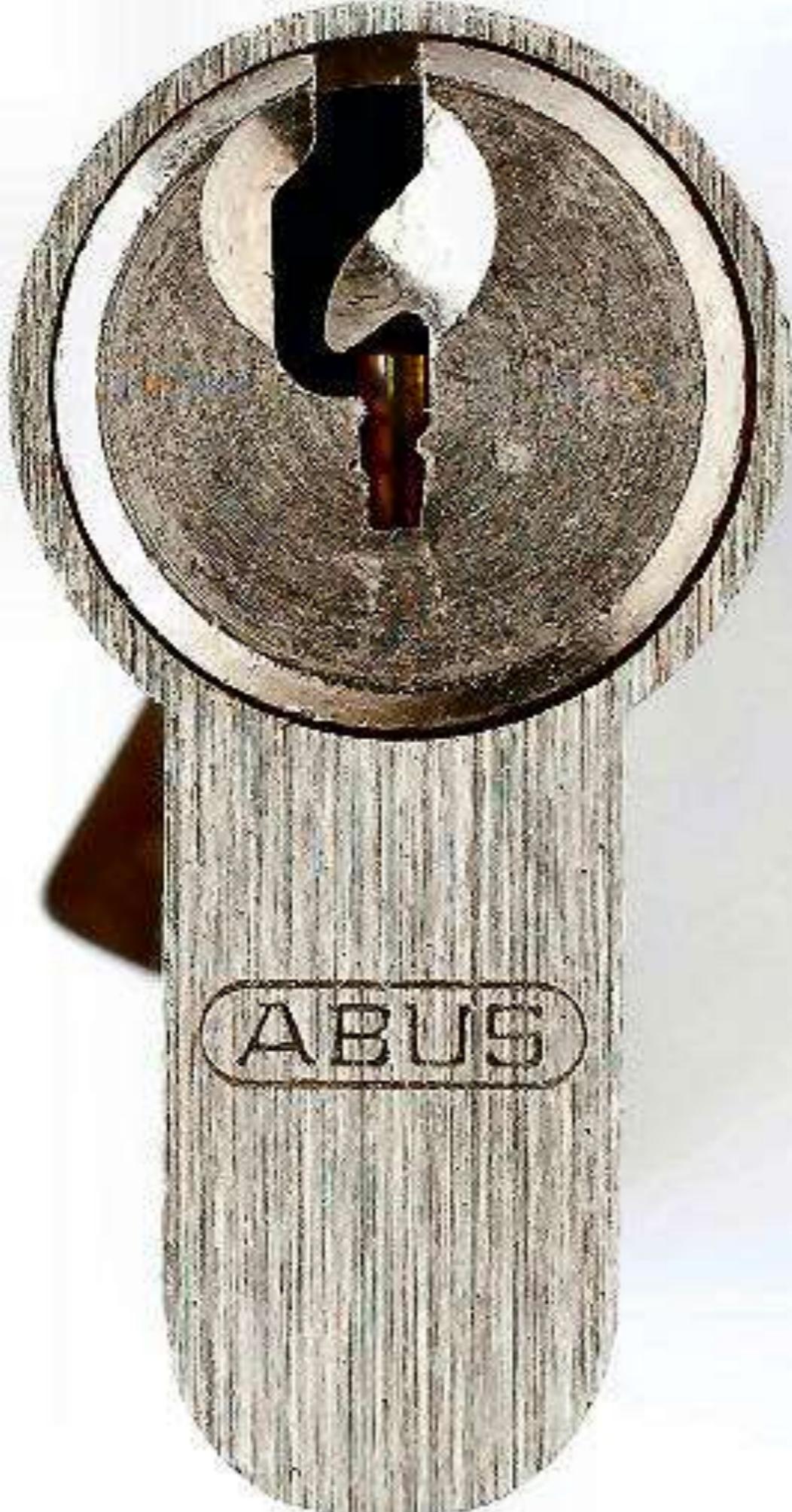
NDE vulnerabilities

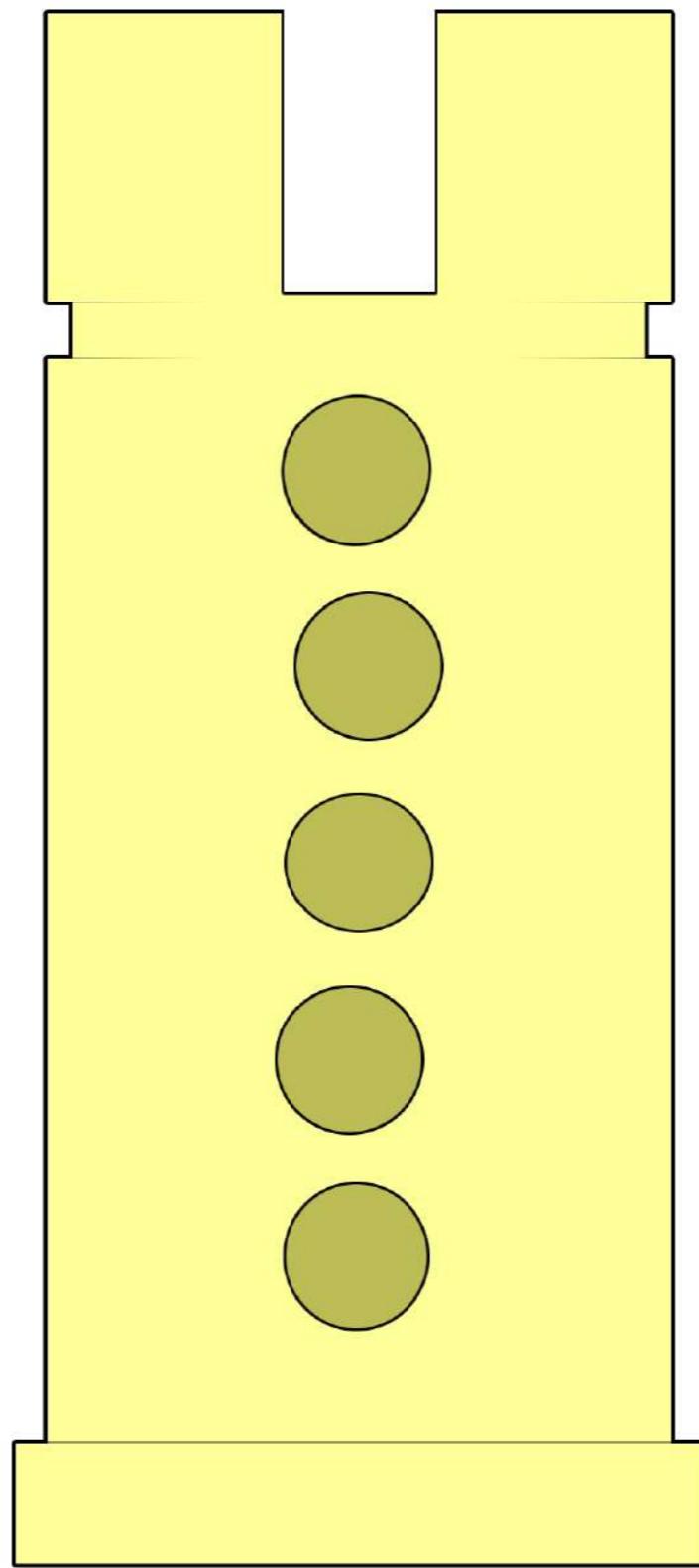
Access to the internals, via the
keyway...

& possibly other attacks to bypass the
pins, for direct access to a locking-bar,
etc.

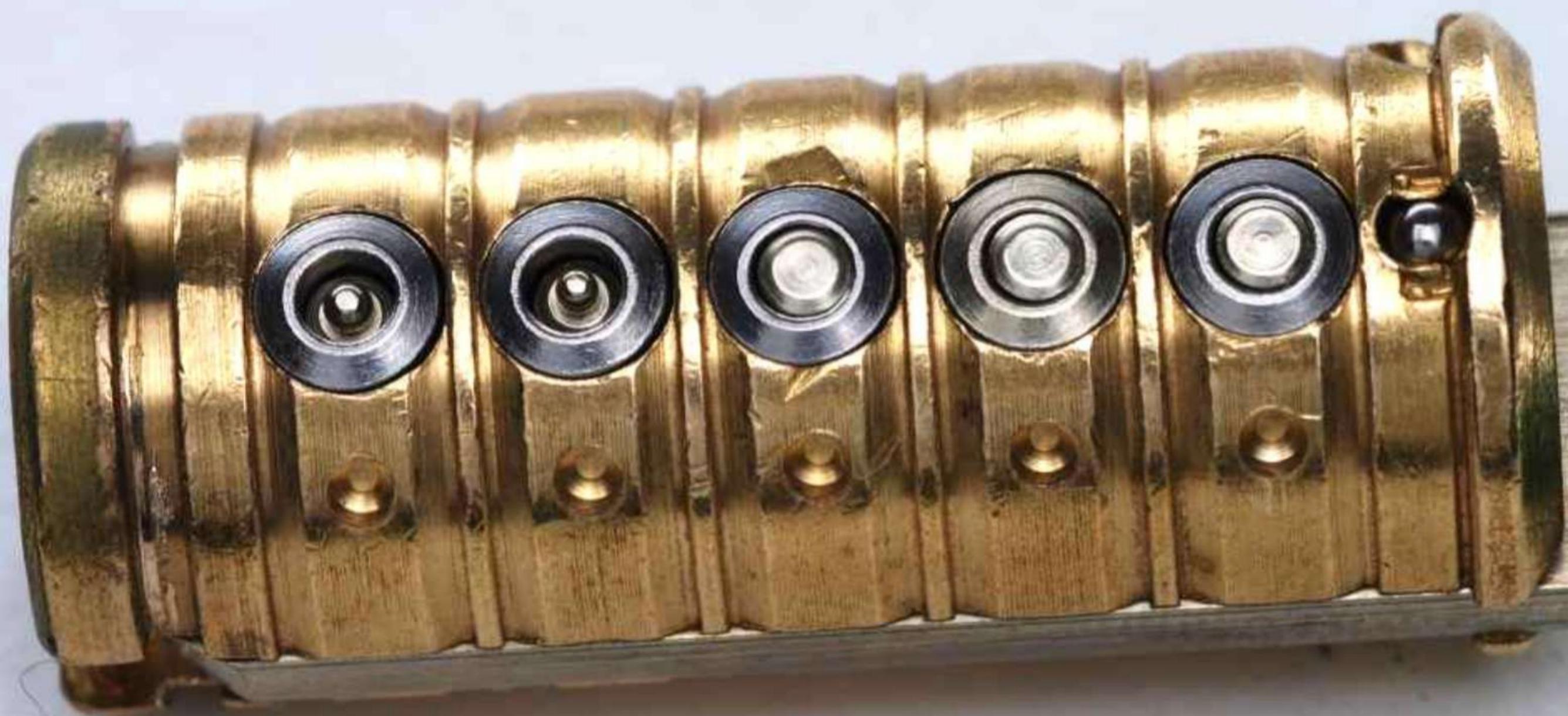
The pin-tumbler design offers great usability through its keying system.

Like a key however, it also gives us free access to the internal locking/blocking mechanisms, via the keyway.











common:

(keys!)

zipping/raking

bumping/snapping

bypassing

jiggler-keys

shimming*

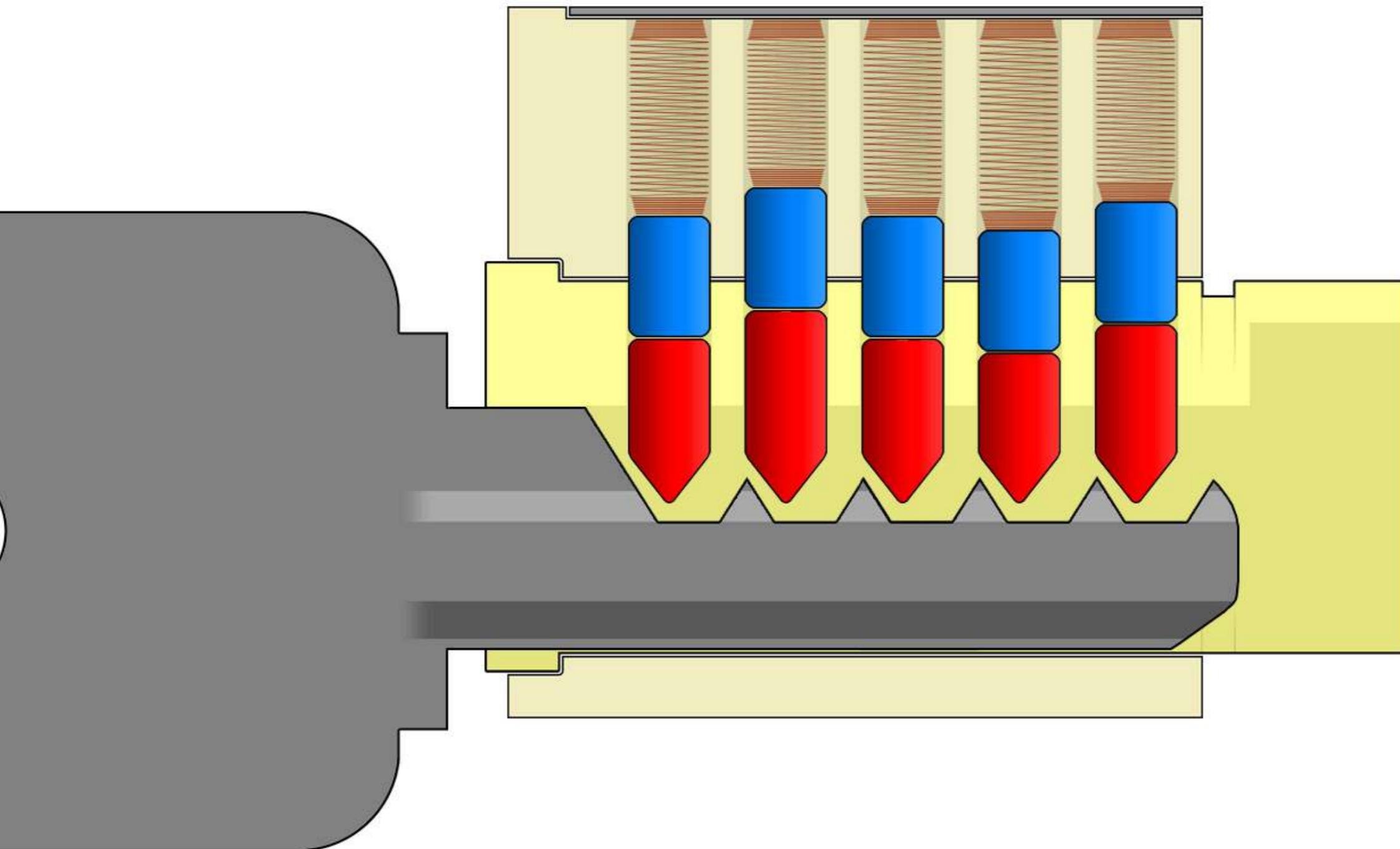
over-lifting*

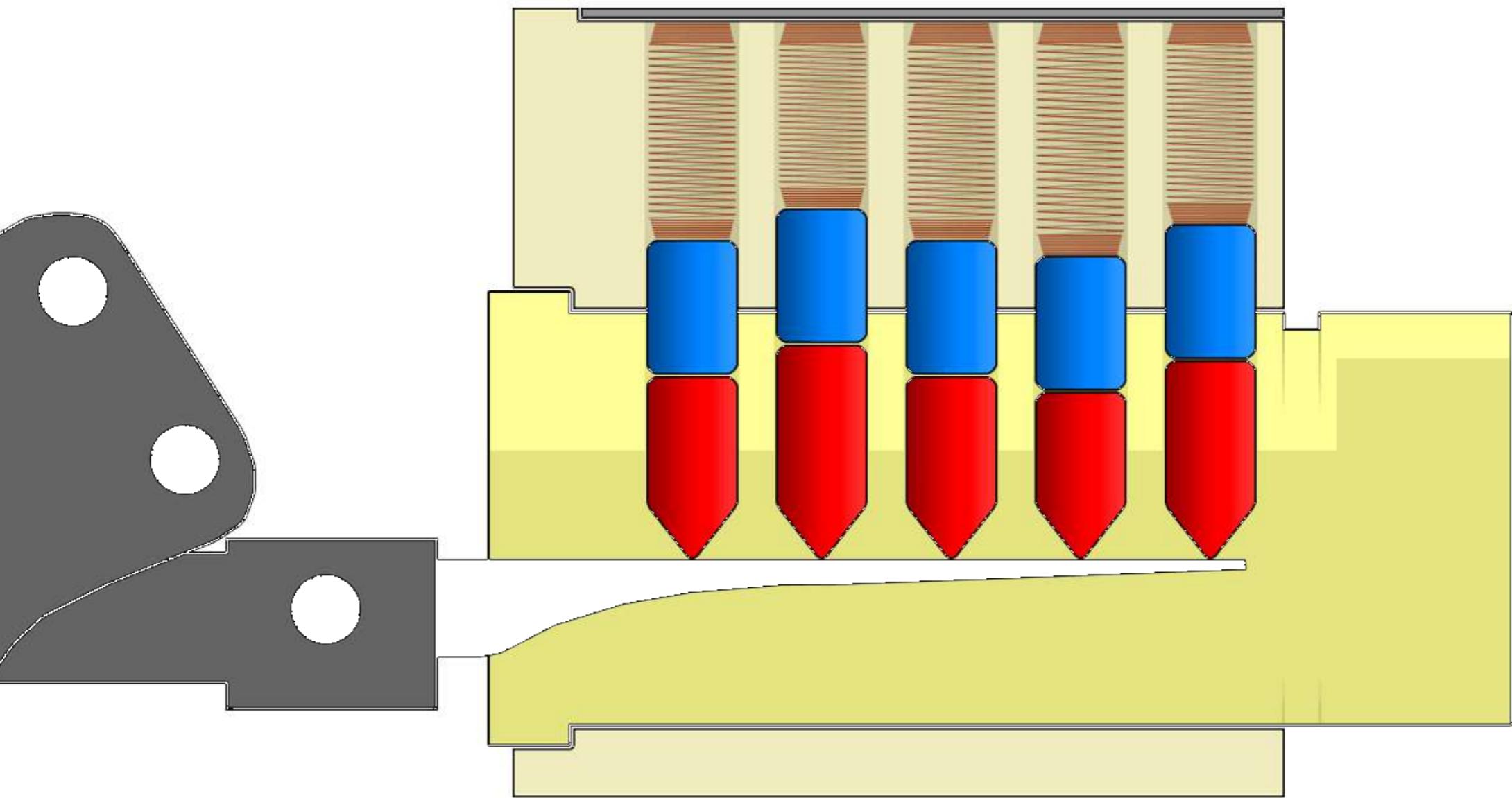
less common:

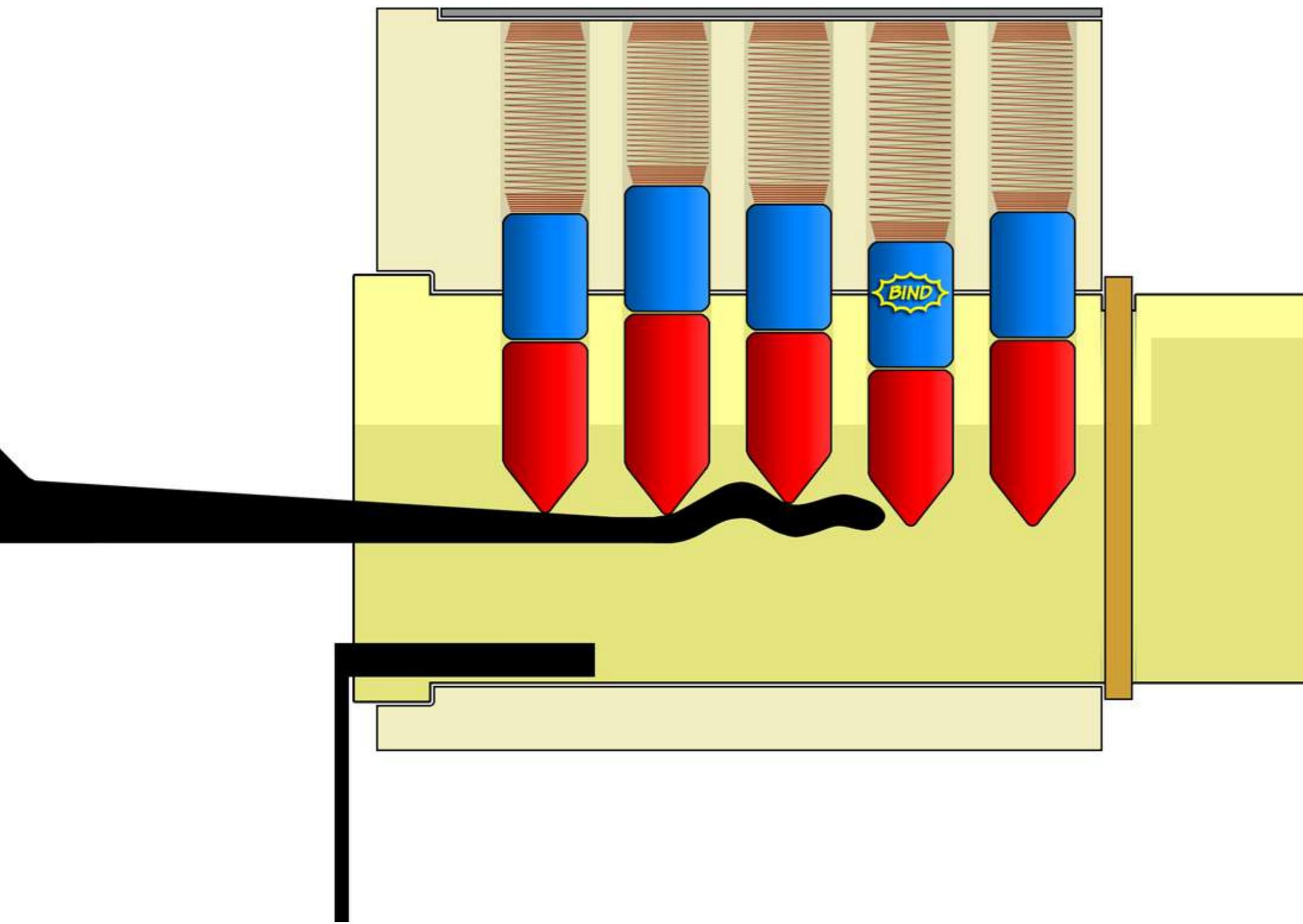
single-pin picking

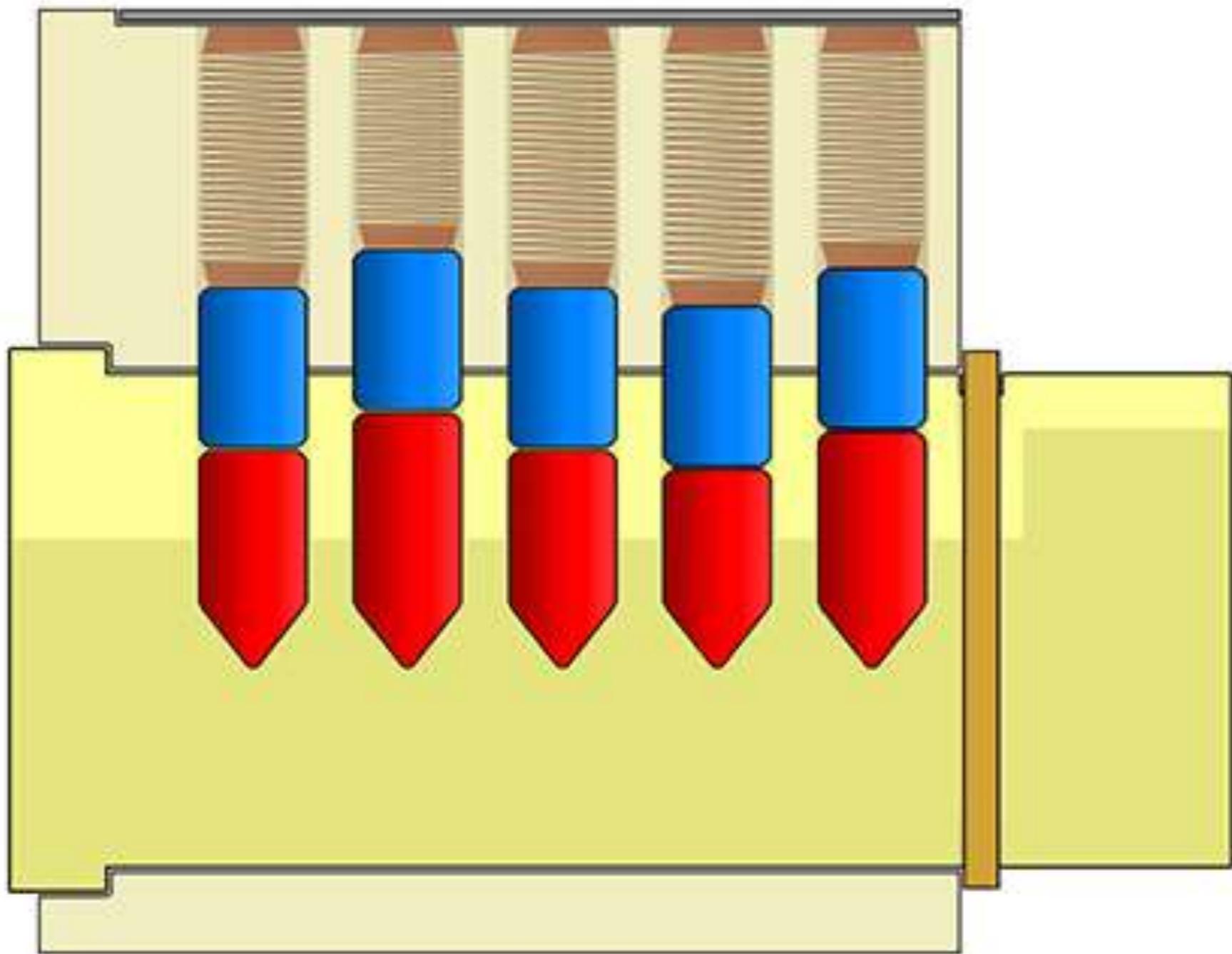
impressioning

decoding*



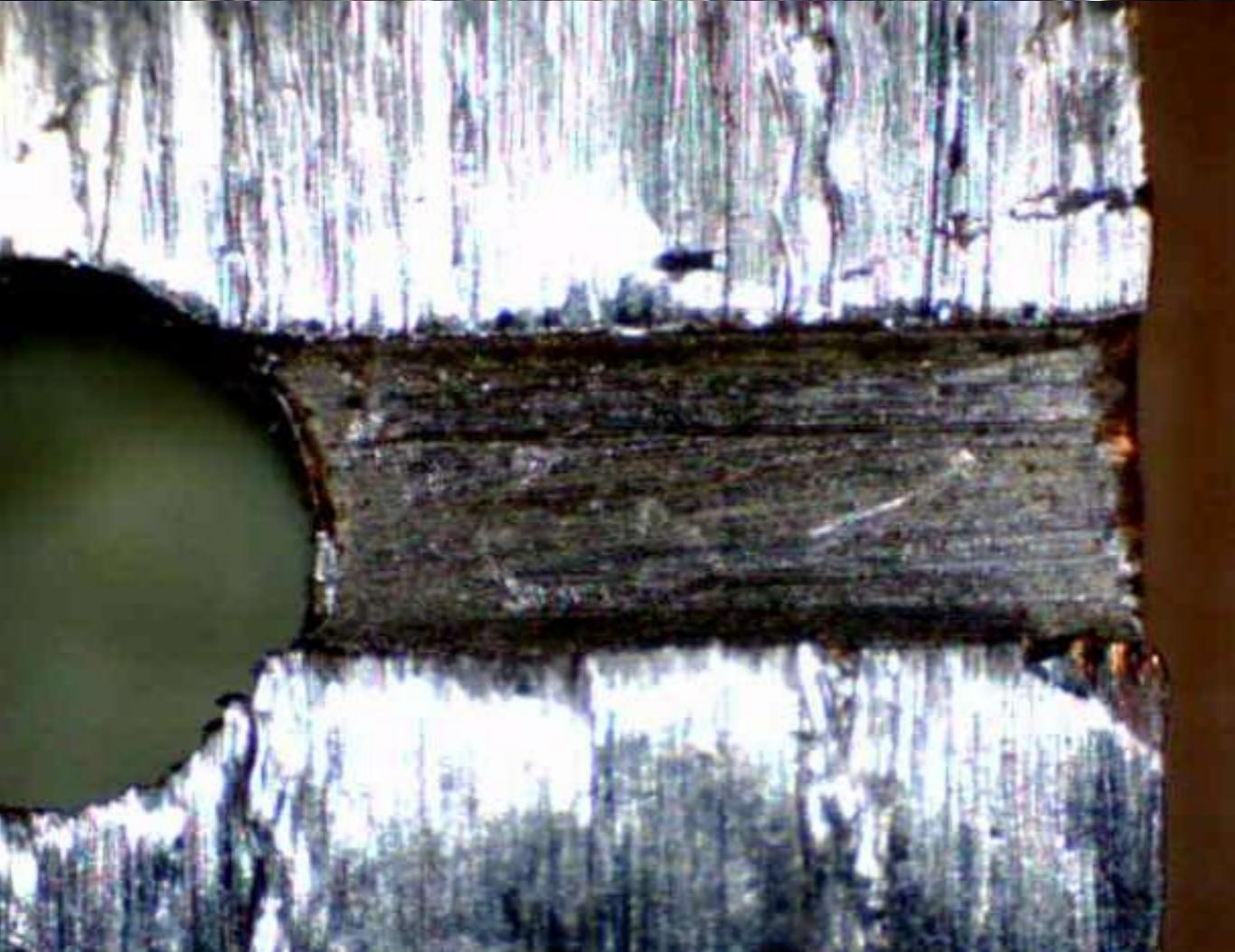
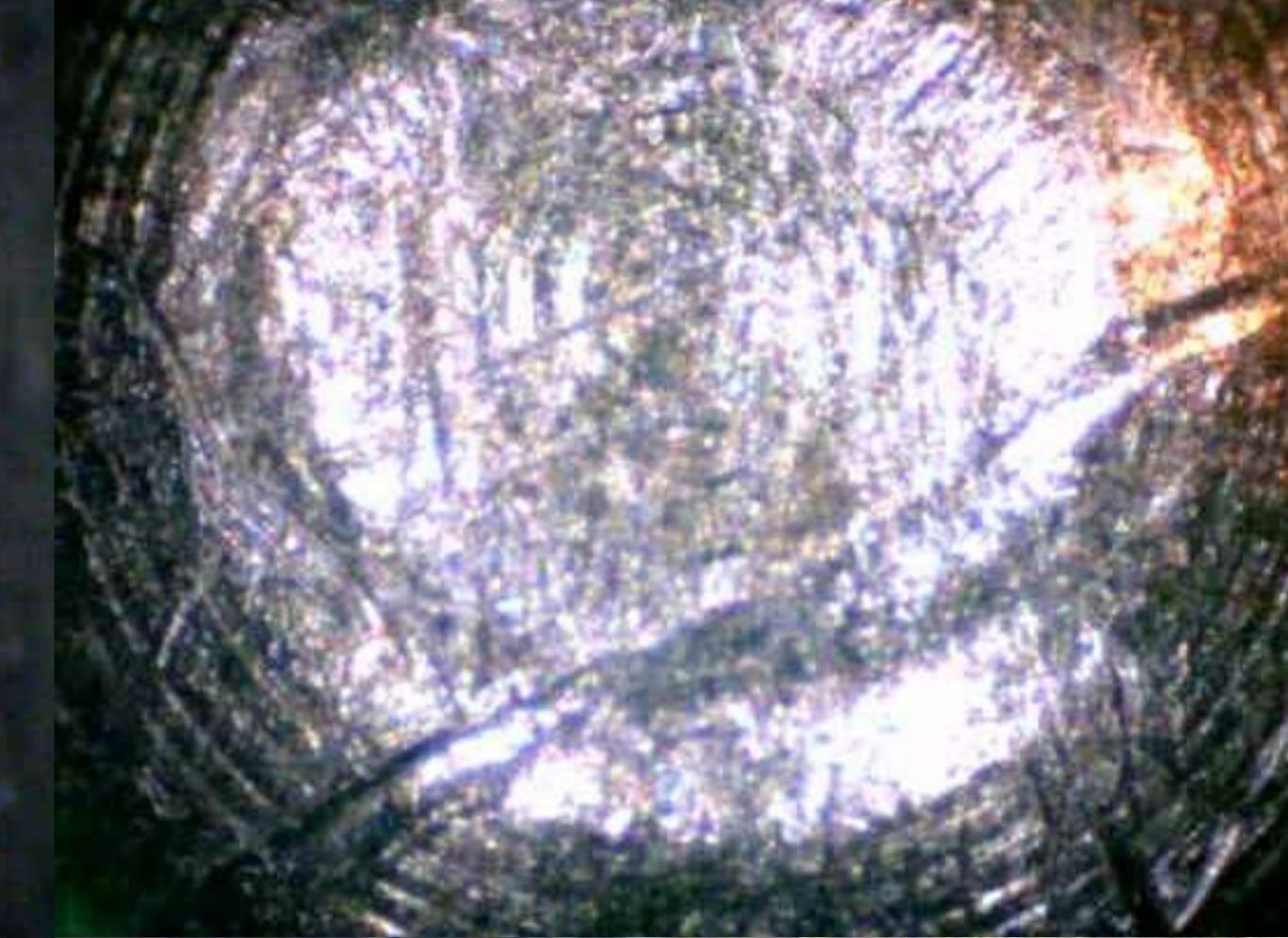






a note on forensics

datagram: lockpickingforensics.com



a note on mastering the priv-esc. of locks + rekeyable padlocks

things i want in a lock

general wishlist:

decent materials

≥1 steel pin stack

restrictive keyway

security pins

anti-drill protection

closed cam

(no C-clips >_<)

for padlocks...

ball-bearing locking-mechanism

(drainage hole)

(\$,) \$\$\$:

sidebars

key w/ moveable element

manufacturer-controlled keys

magnets, laser rails, etc.

DIY improvements

if re-keyable:

good biting*

missing 6th pin

anti-bump pins

security pins

</talk...>

hacking this design

Taking it apart...

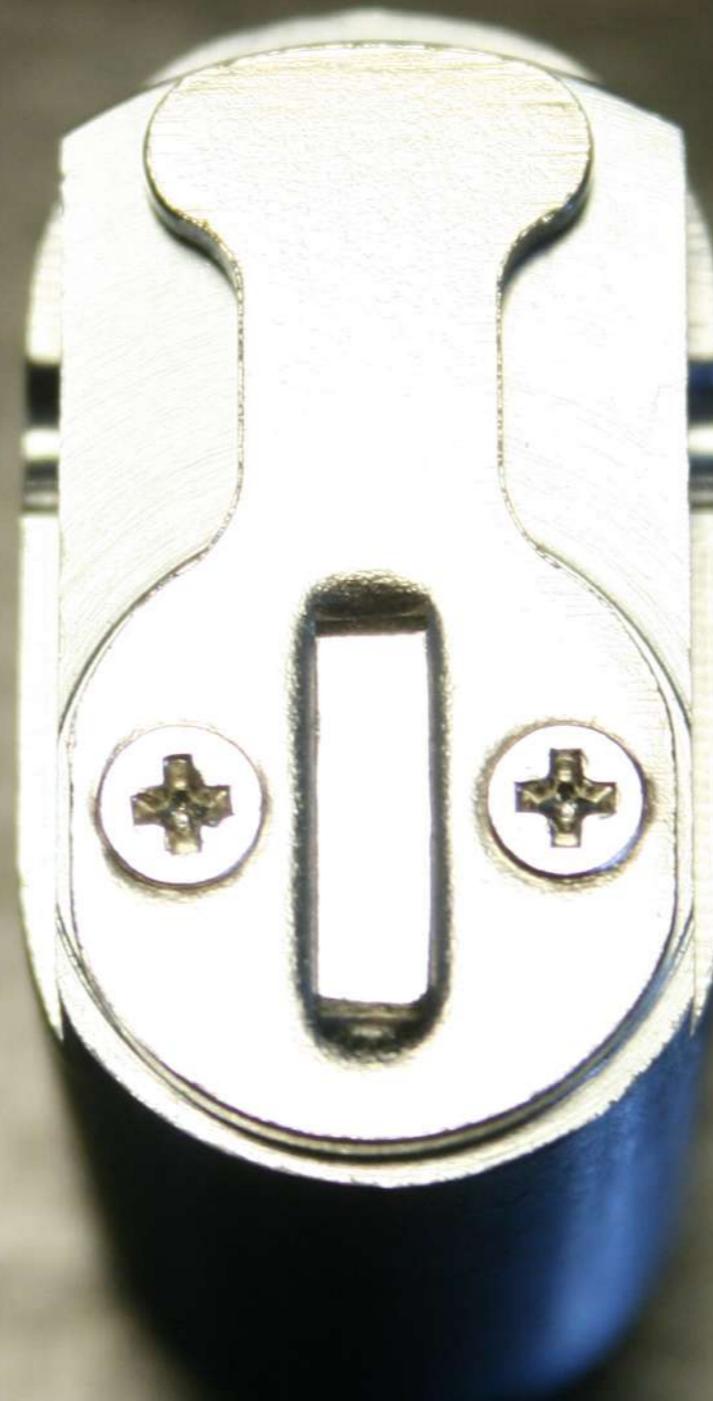
Without it exploding in my face

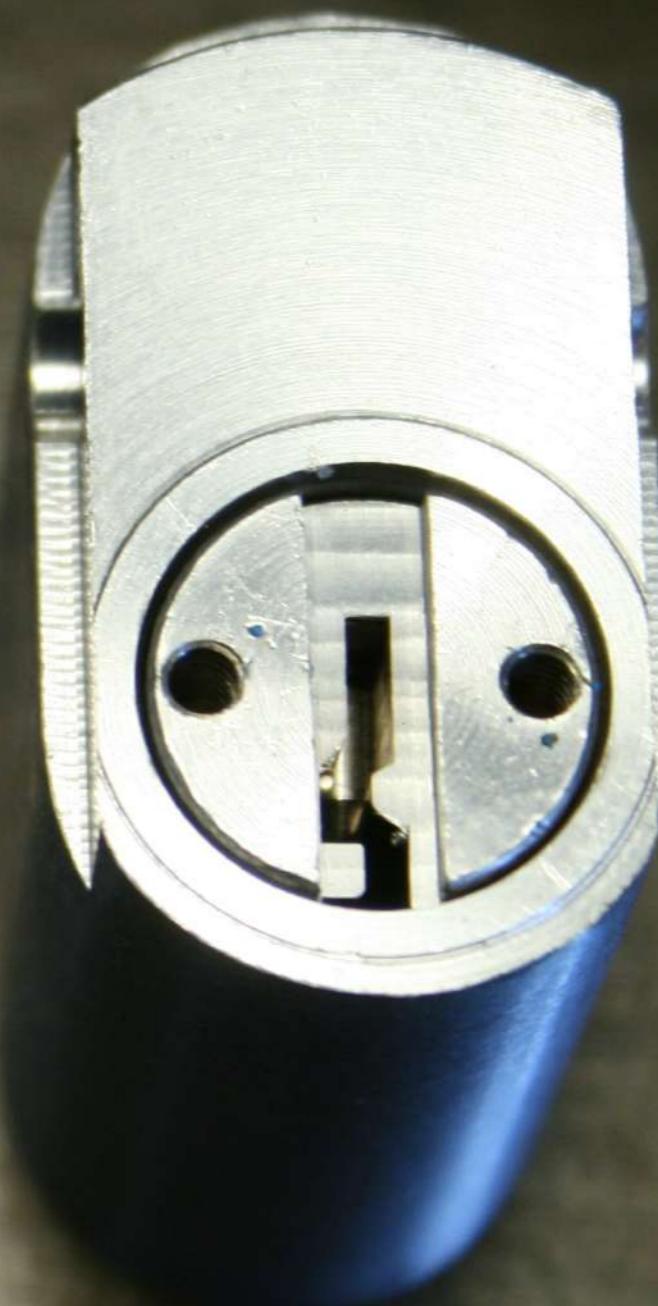
SUPPLYING THE























1

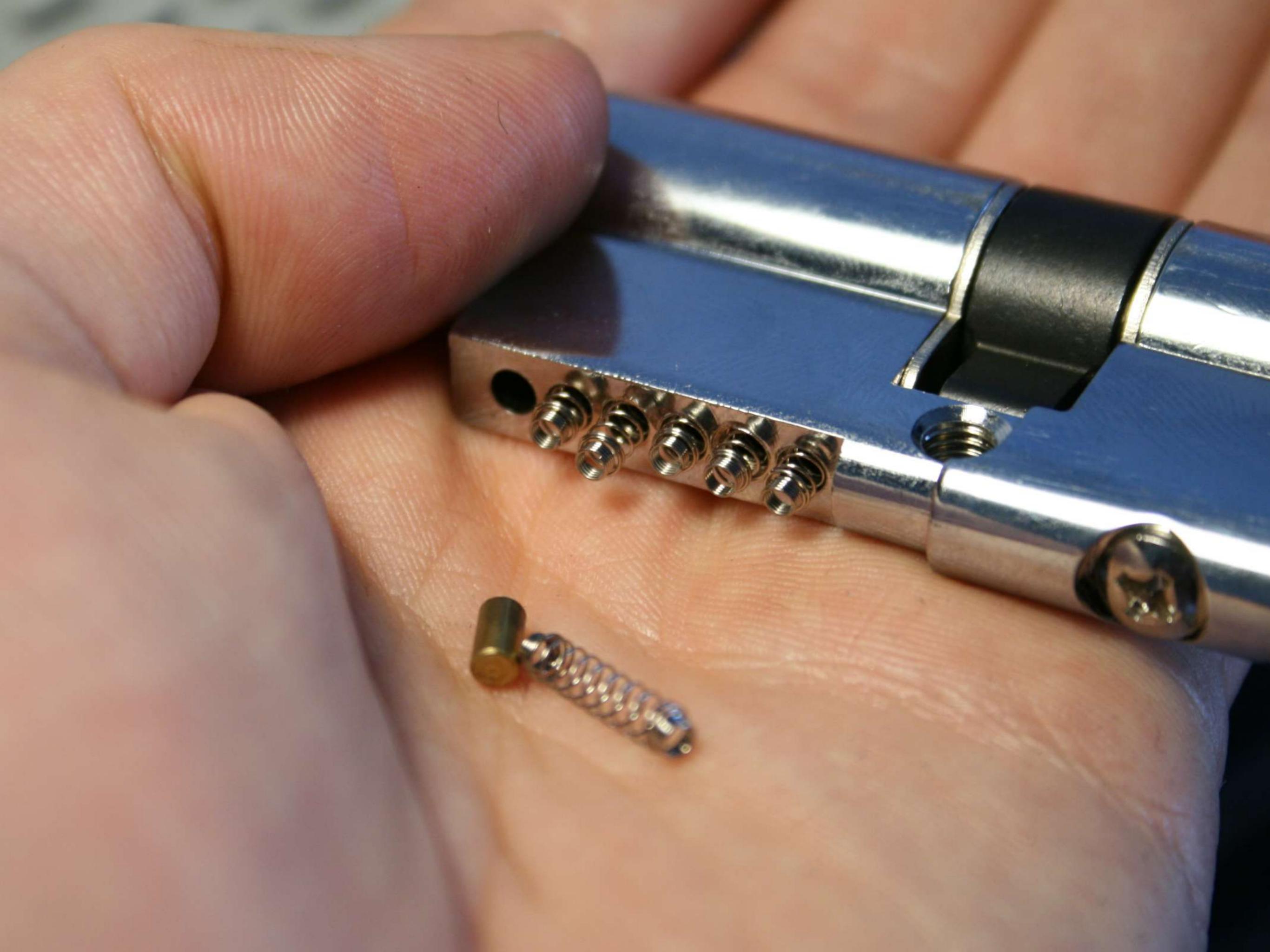
2

3

4

5

6











BRAND





EPAVIA



BRASS

1

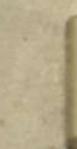
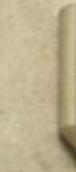
2

3

4

5

6



What to hack?

Pins? Pin chambers?

Security pins

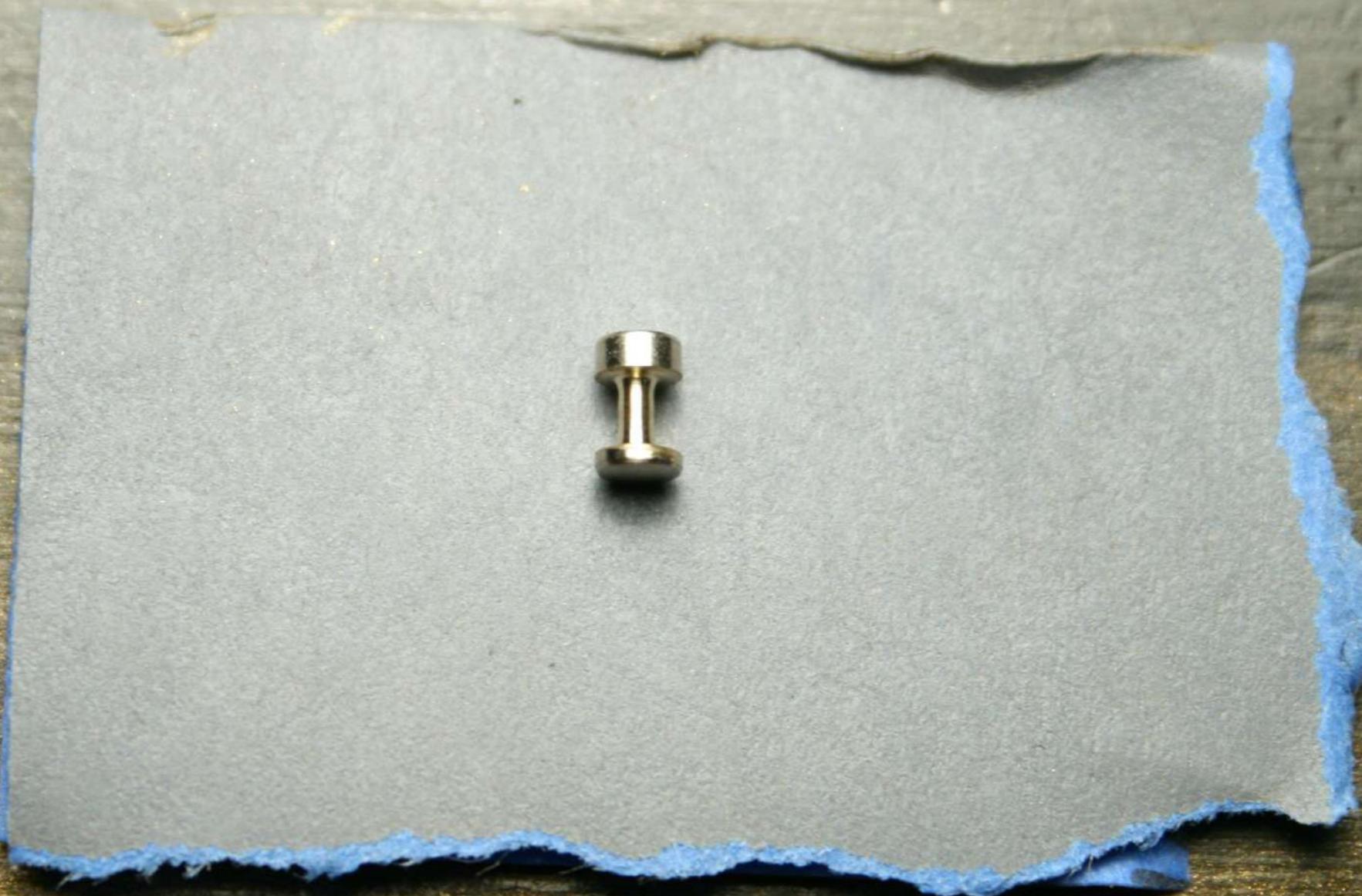
Spool

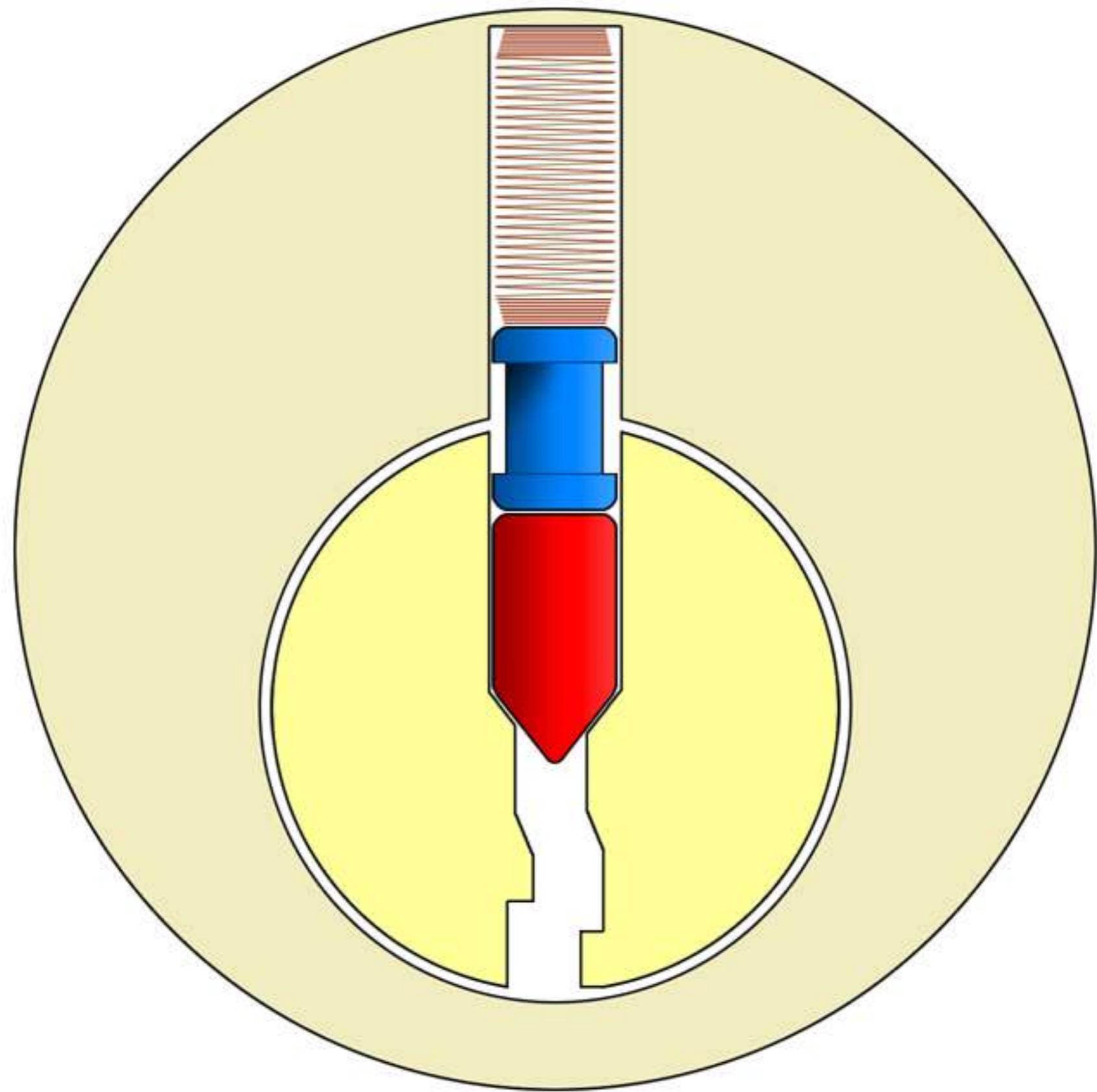
Mushroom

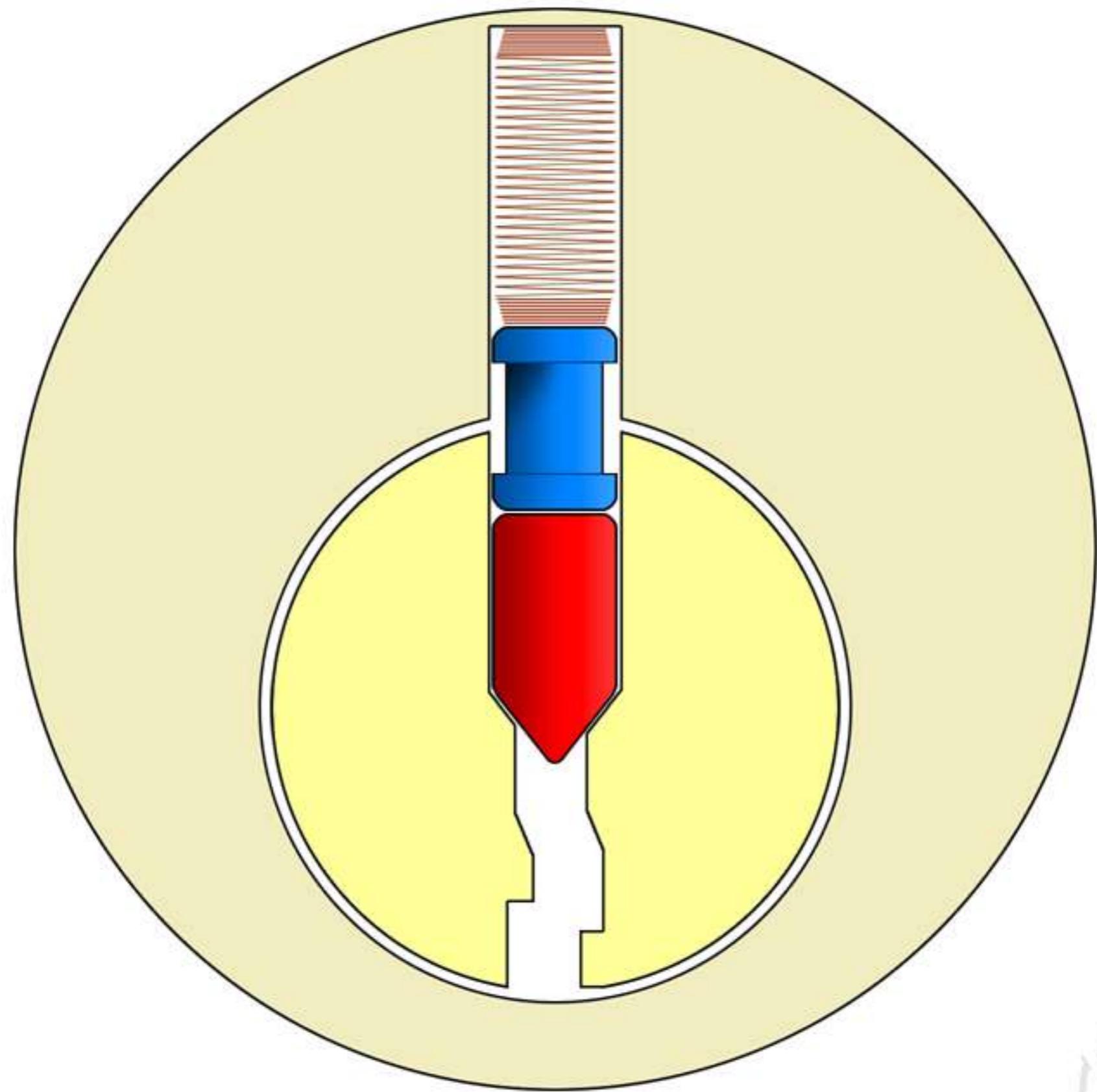
Serrated

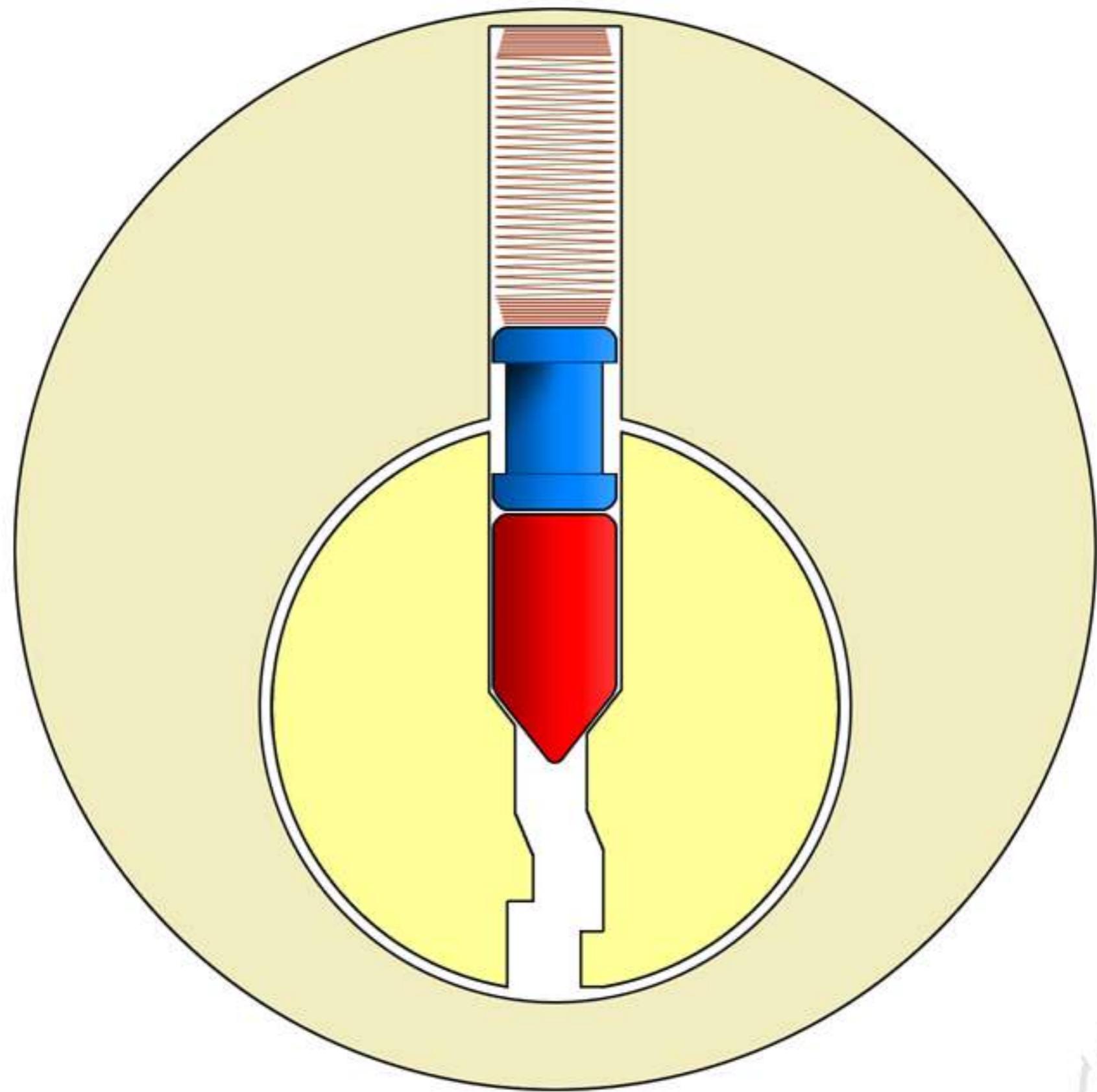
T-pin

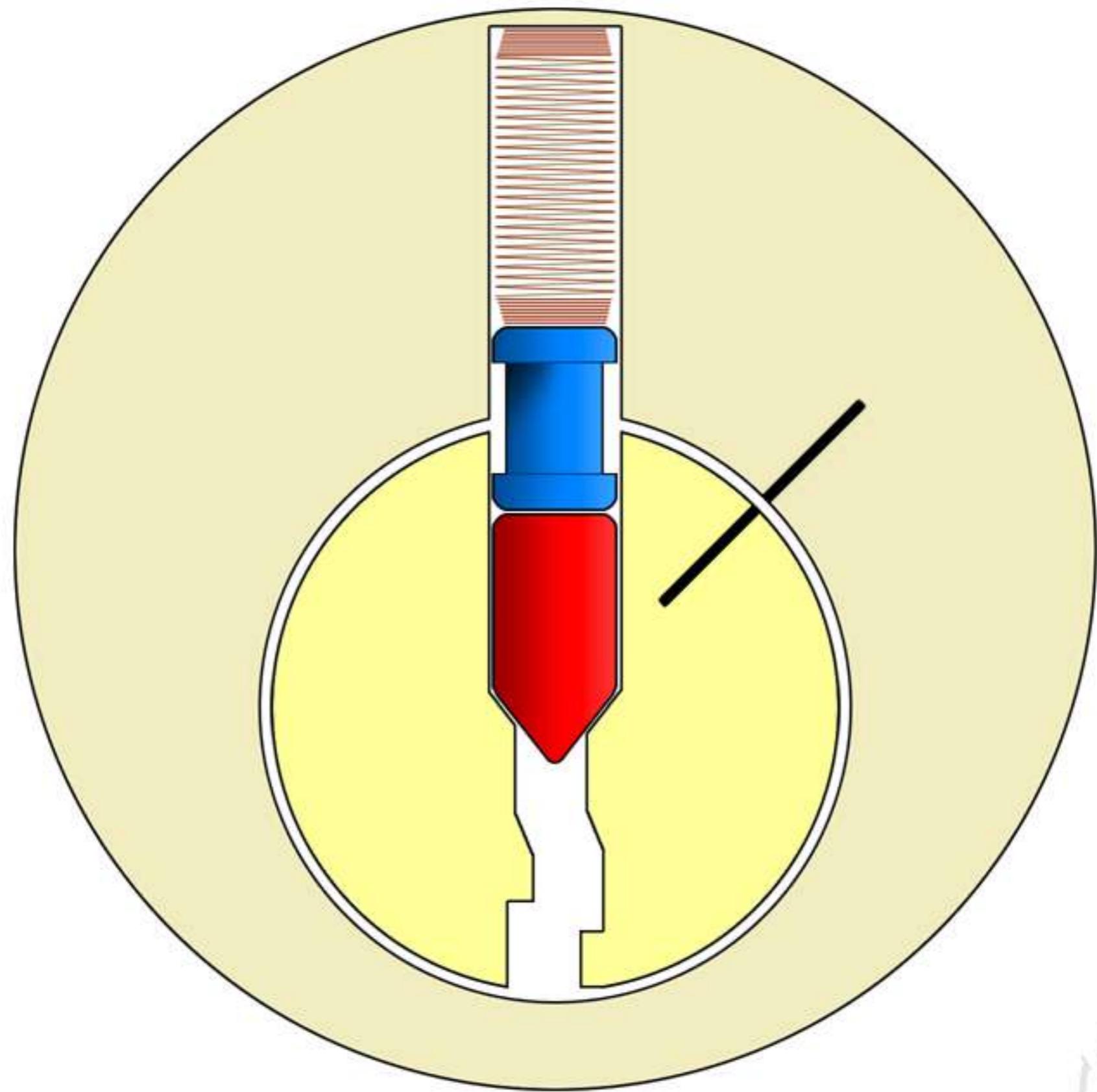
Combination/hybrids





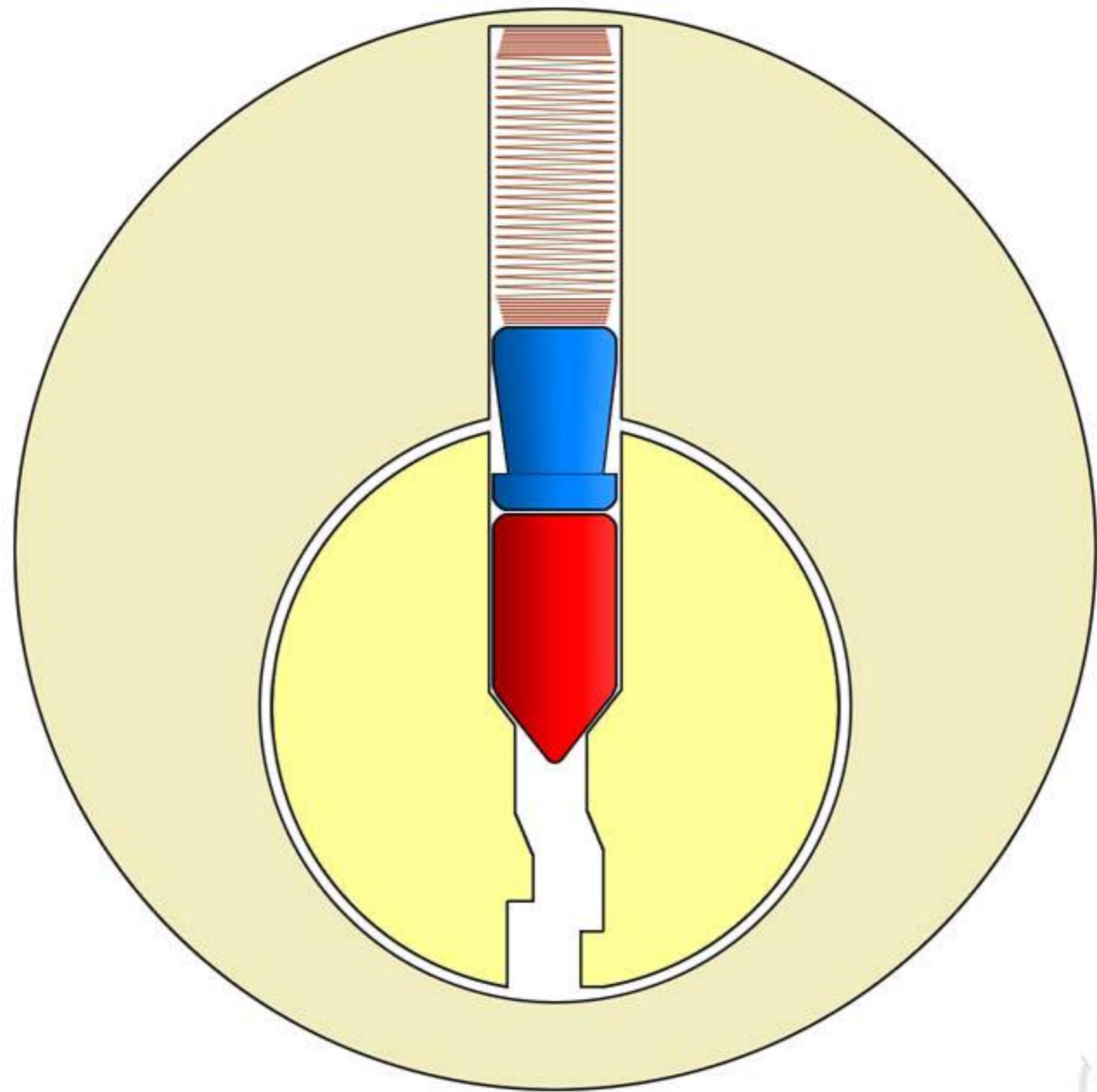


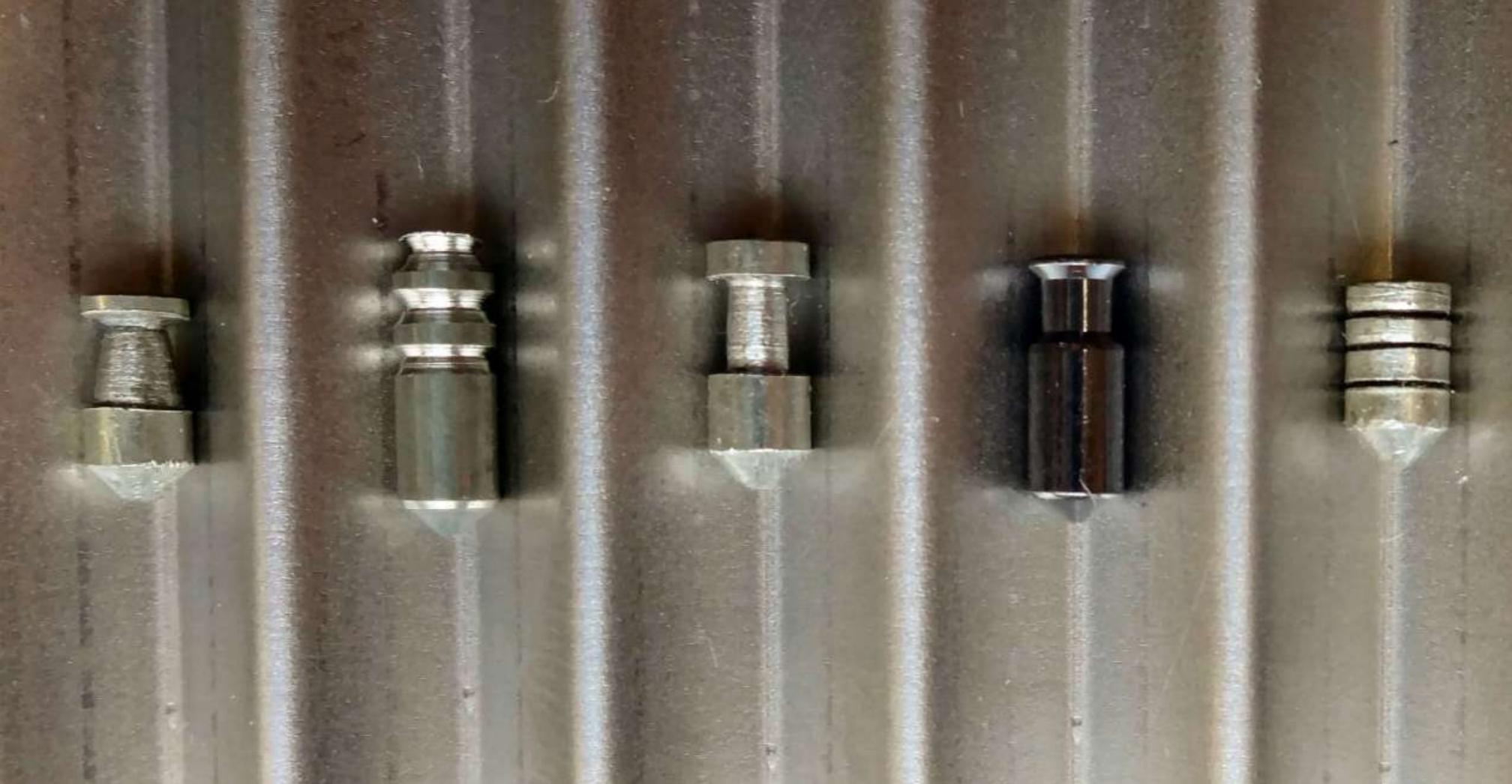




— in all shapes and sizes







Security pins

DIY from your lock's standard pins!

Do you even lathe?

(I wish...)

If not, grab a dremel or cord(less) drill
and hack ourselves a mini lathe.





















1

2

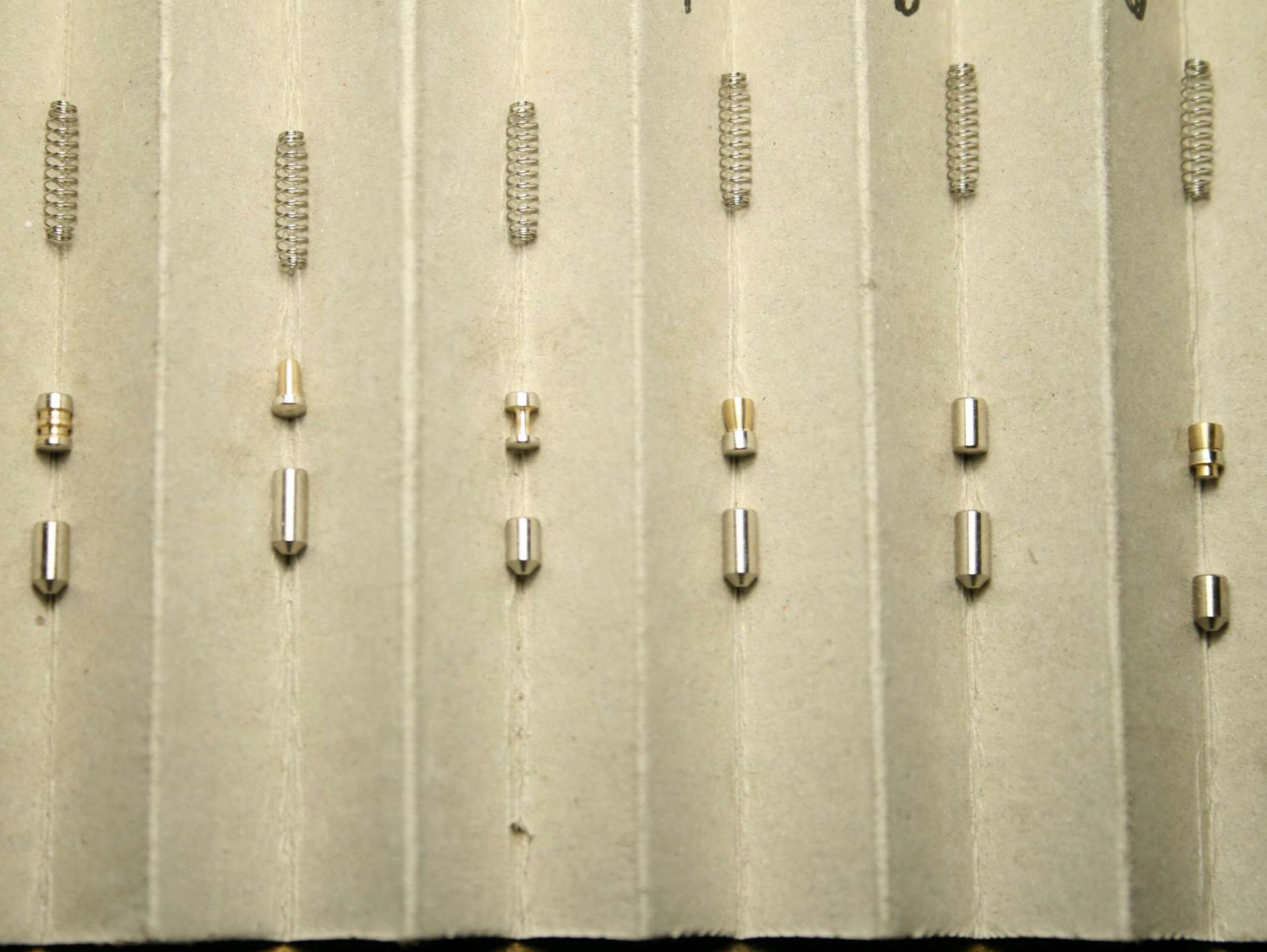
3

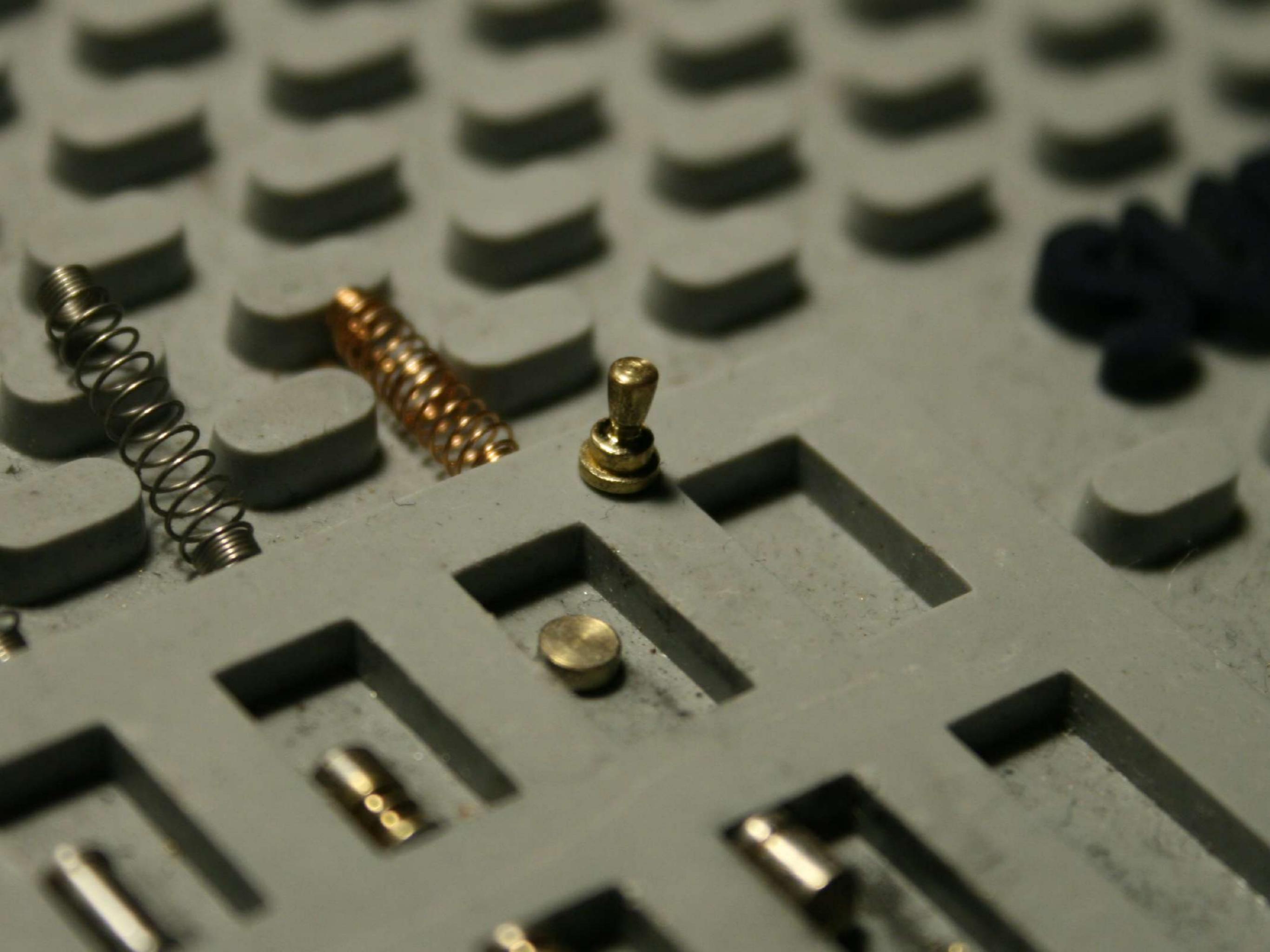
4

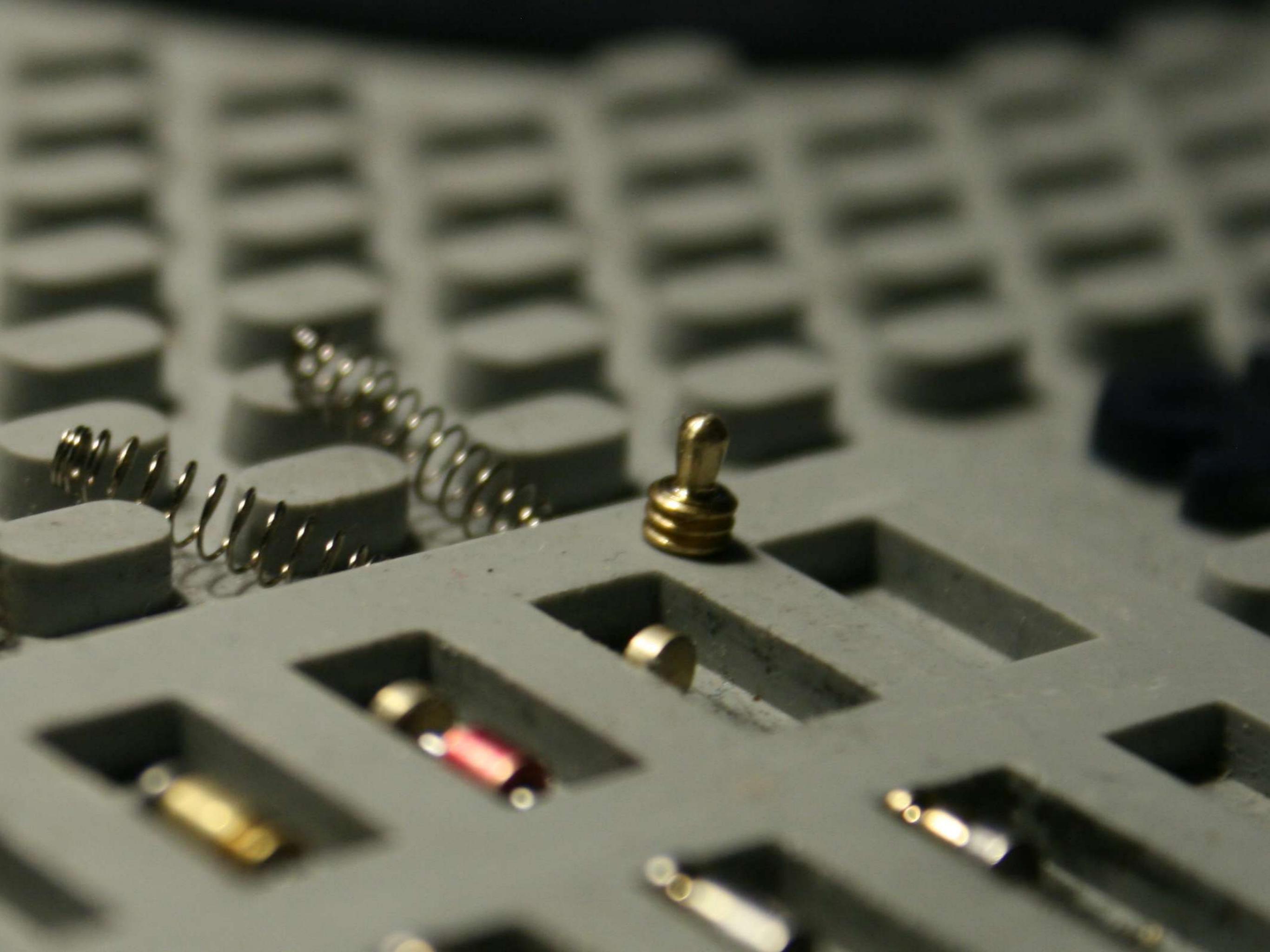
5

6



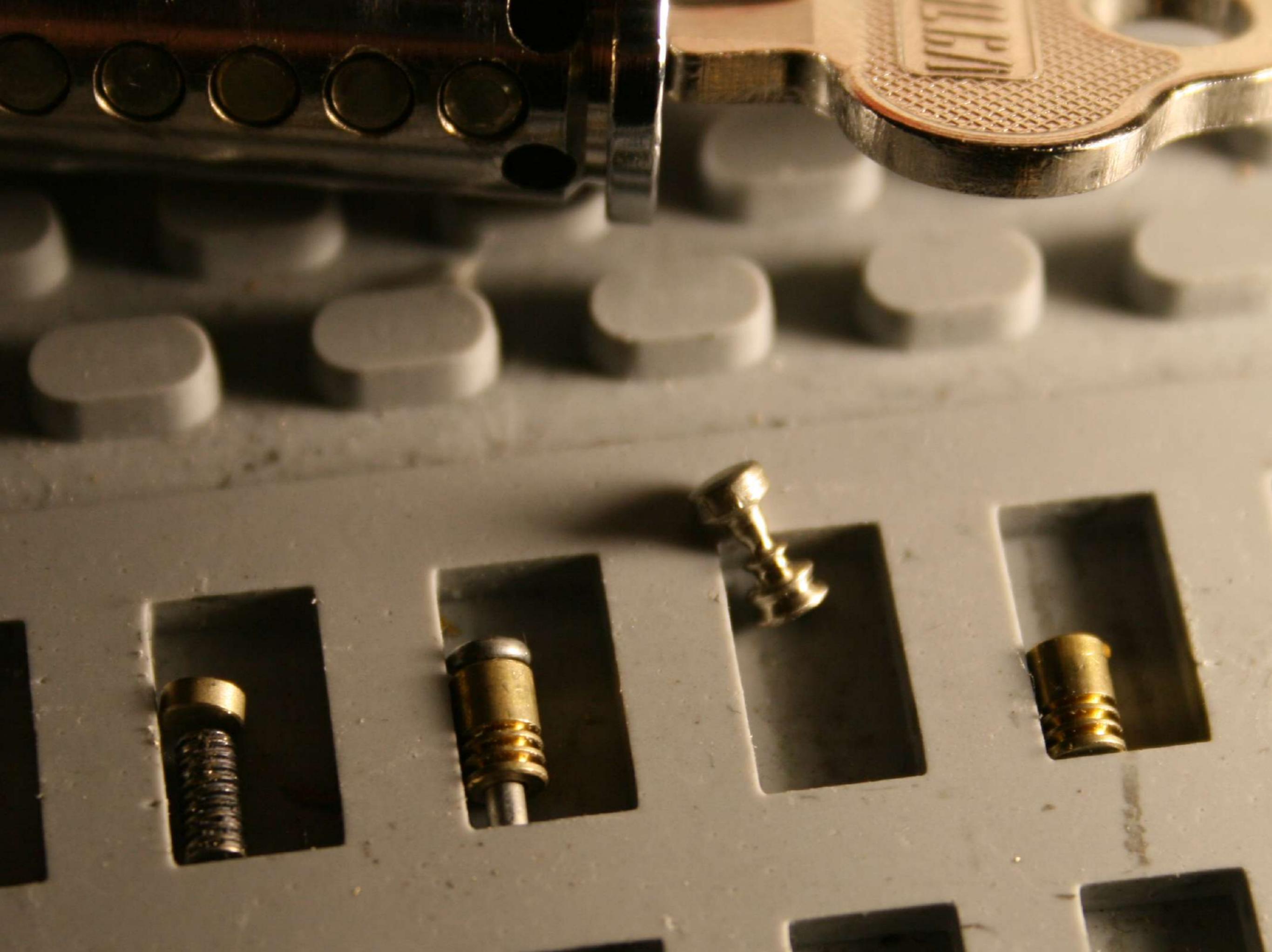


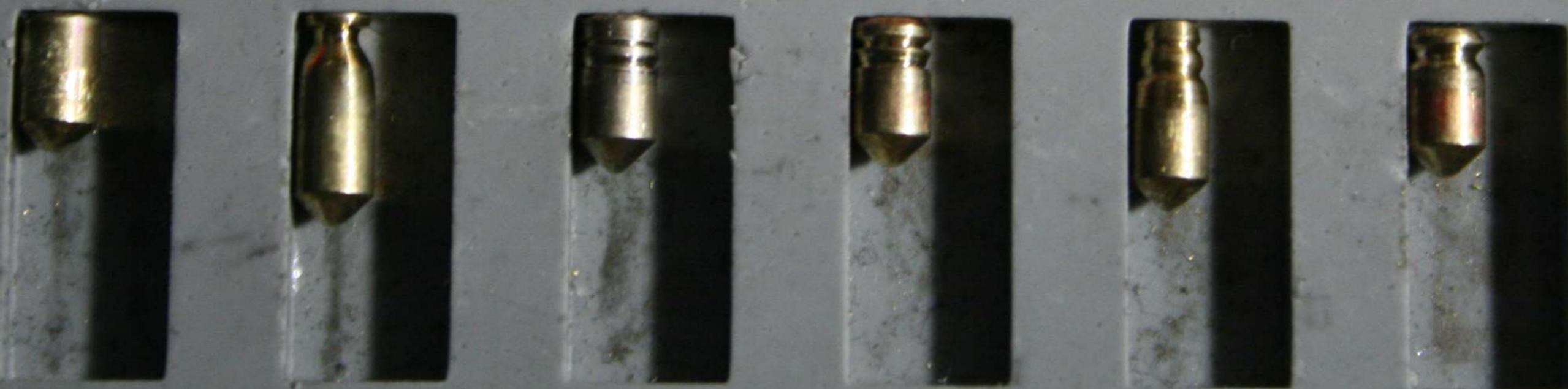
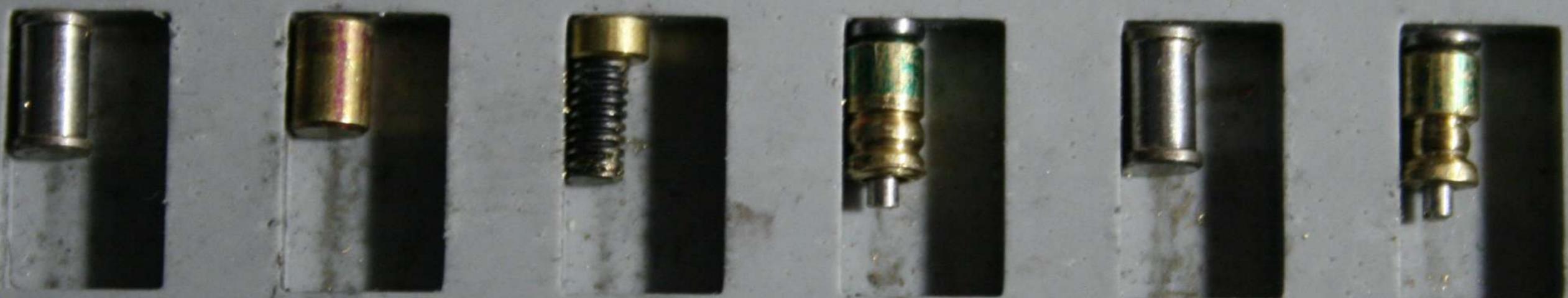






Pin-in-Pin designs



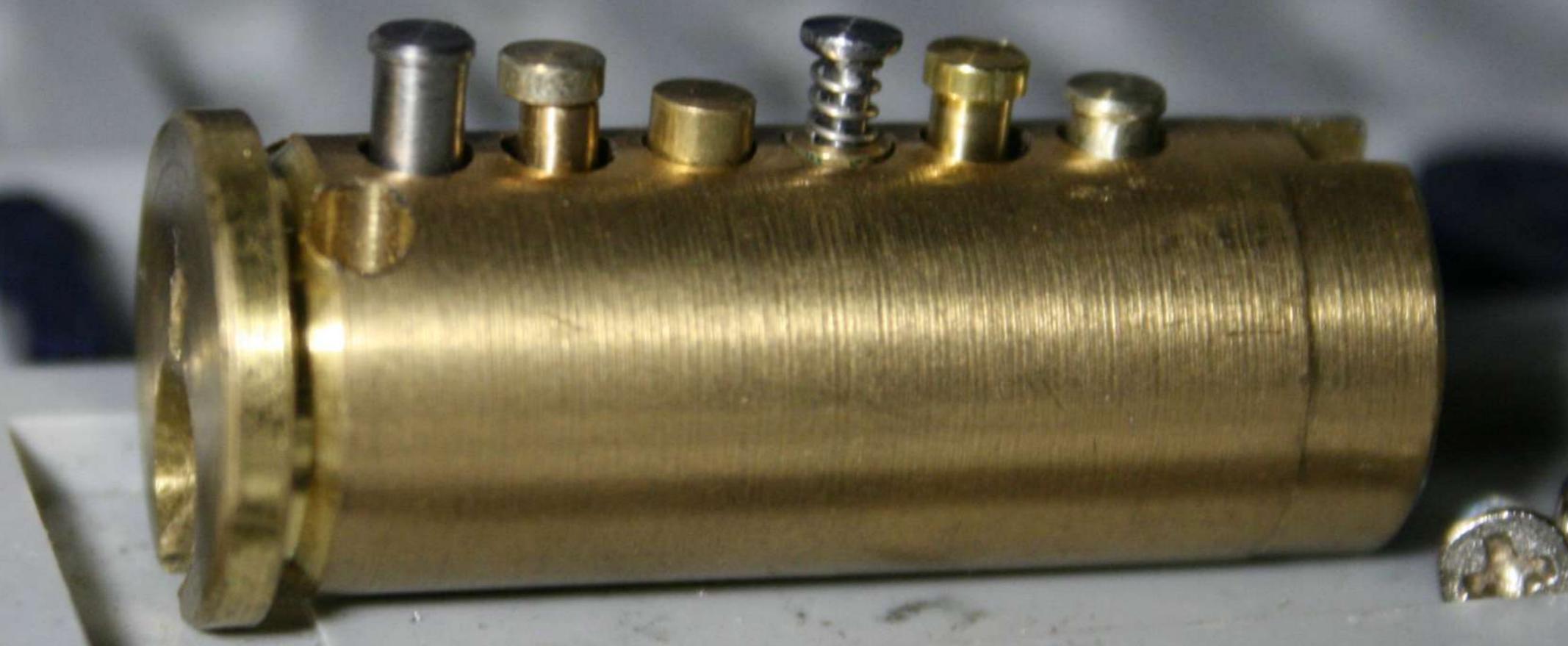


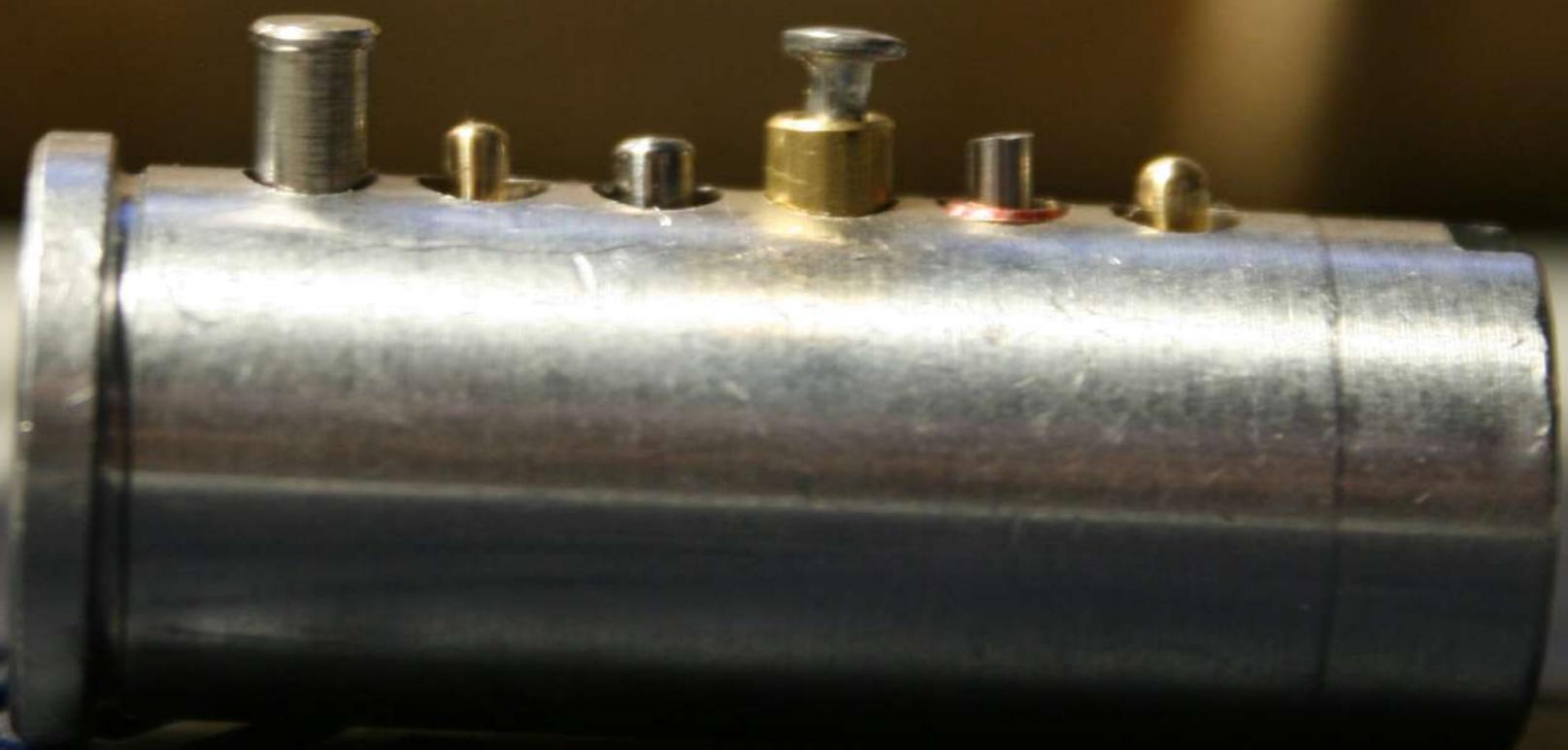


1924



















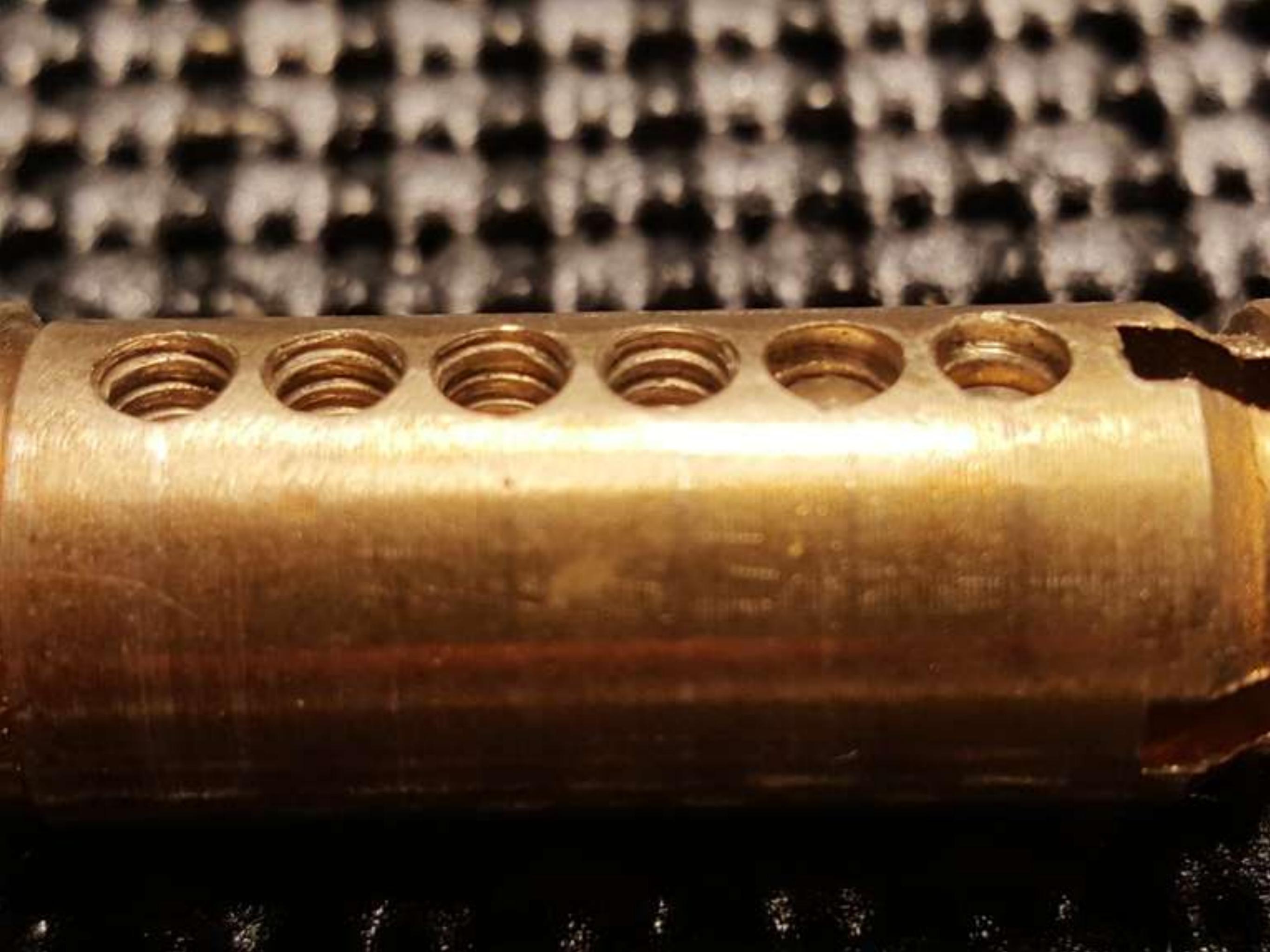


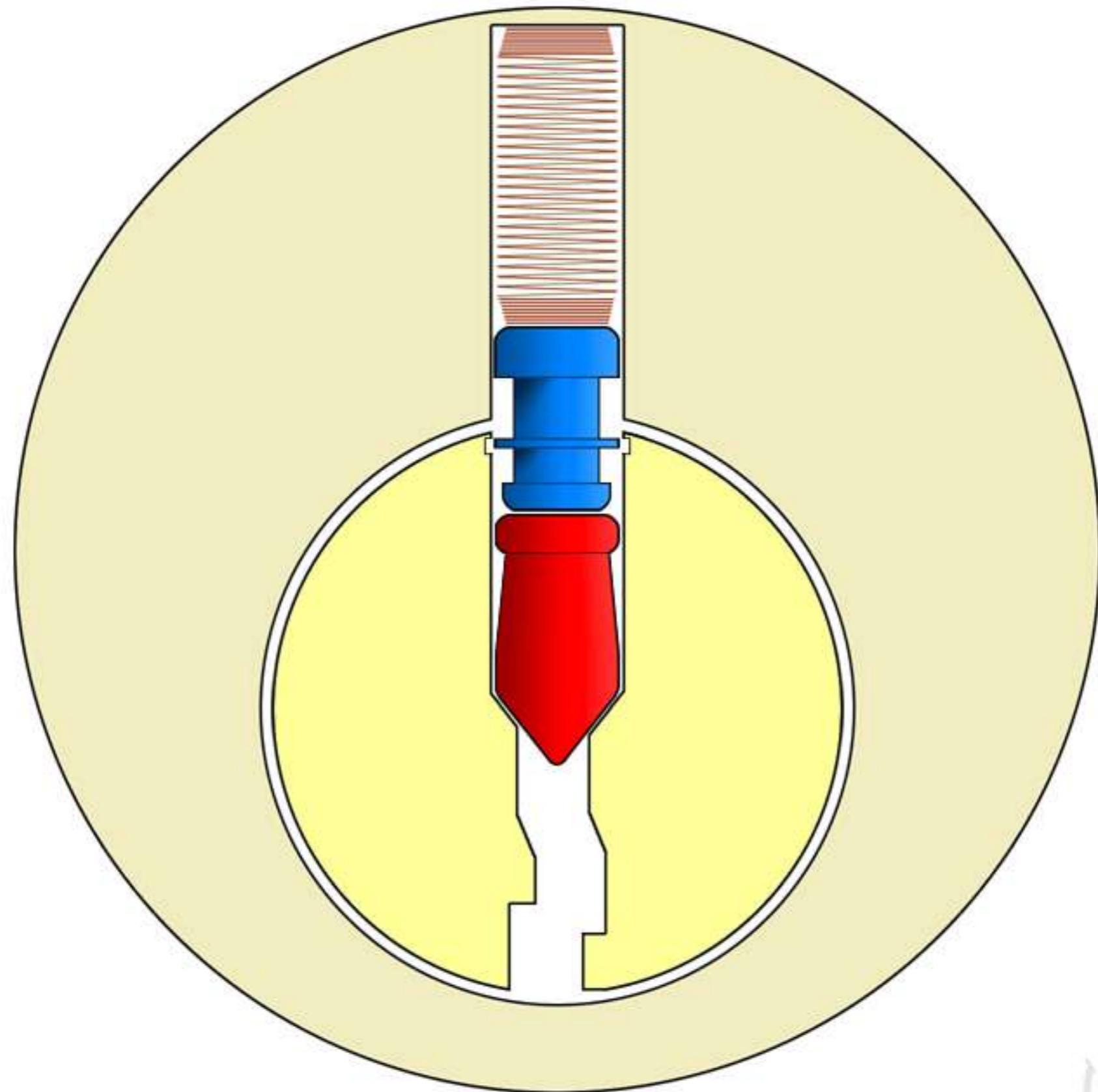




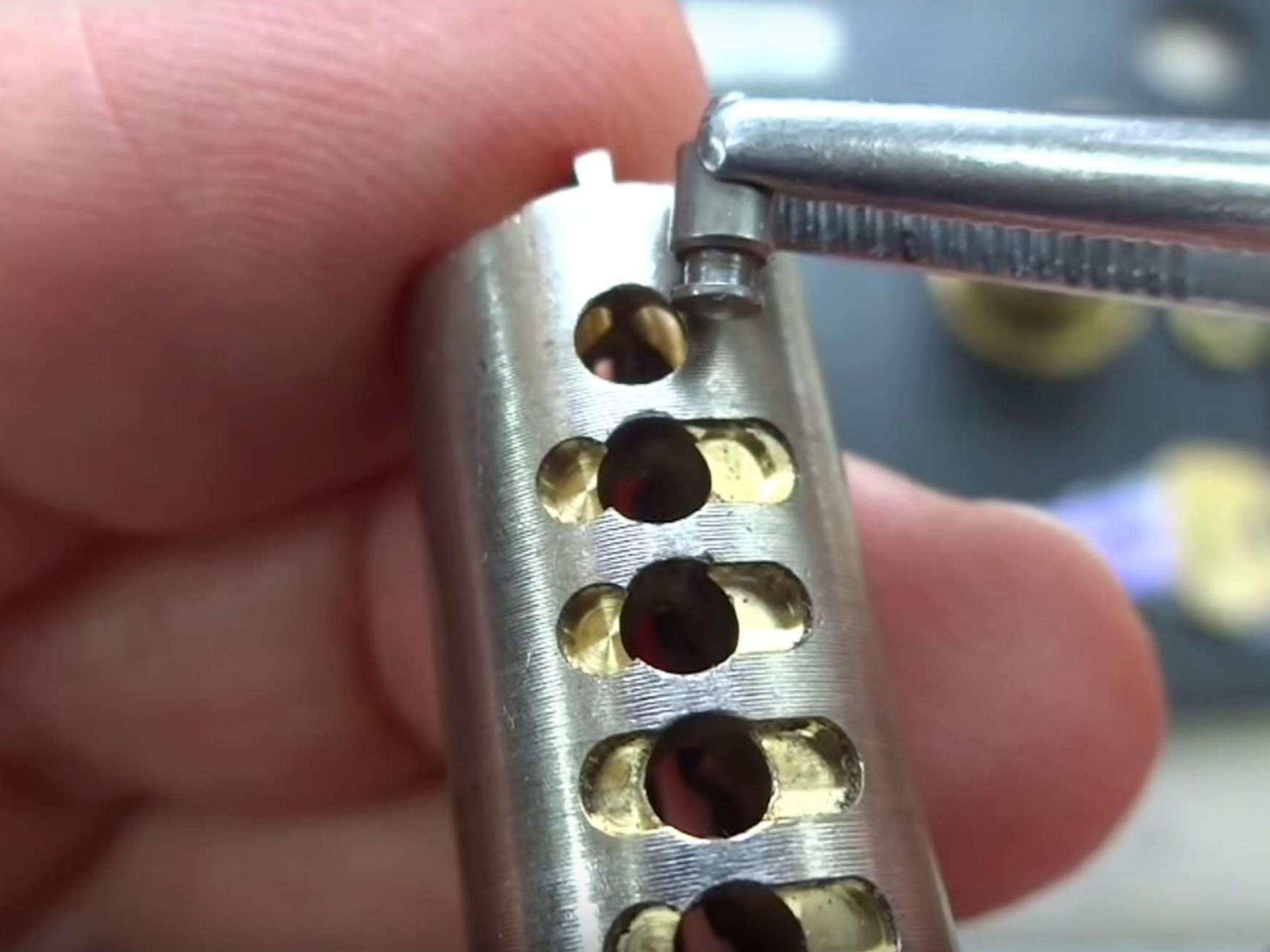
Core modifications





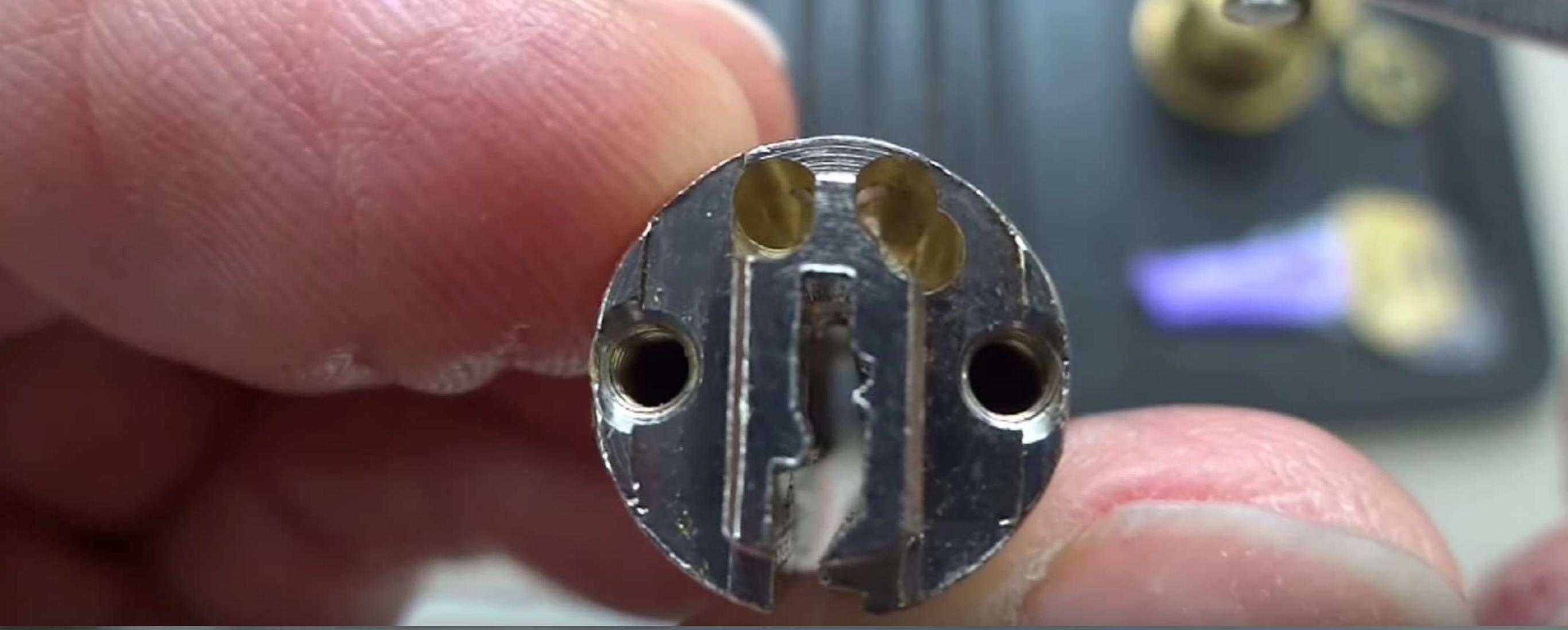












Thanks

- BosnianBill
- KeyPicking.com
- Flywheel
- Korver
- locksport scene generally



klepas@klepas.org



<http://klepas.org>



@klepas