

# Focusing the Hammer on the String

Laying the foundation for voicing

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# Elements:

- Pinning
- Travelling
- Squaring hammers
- Filing hammer crowns
- Leveling strings
- Mating hammers to strings

# 1. Firm pinning

- Reduces wobble and loss of force
- Firmness is more important than friction
- Friction may or may not correspond to firmness
- Minimal removal of felt
- Maximum packing of felt

Remove shank





Place screw







Tools and supplies laid out



Remove pin



Size burnish





Apply Protek



Insert pin





19.5 49

20 50

20.5 51

21 52

21.5 53

22 54

22.5 55

23 56

23.5 57

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24 59

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50 20

51 20.5

52 21

53 21.5

54 22

55 22.5

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57 23.5

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59 24

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49 19.5

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23.5



## 2. Travel and square

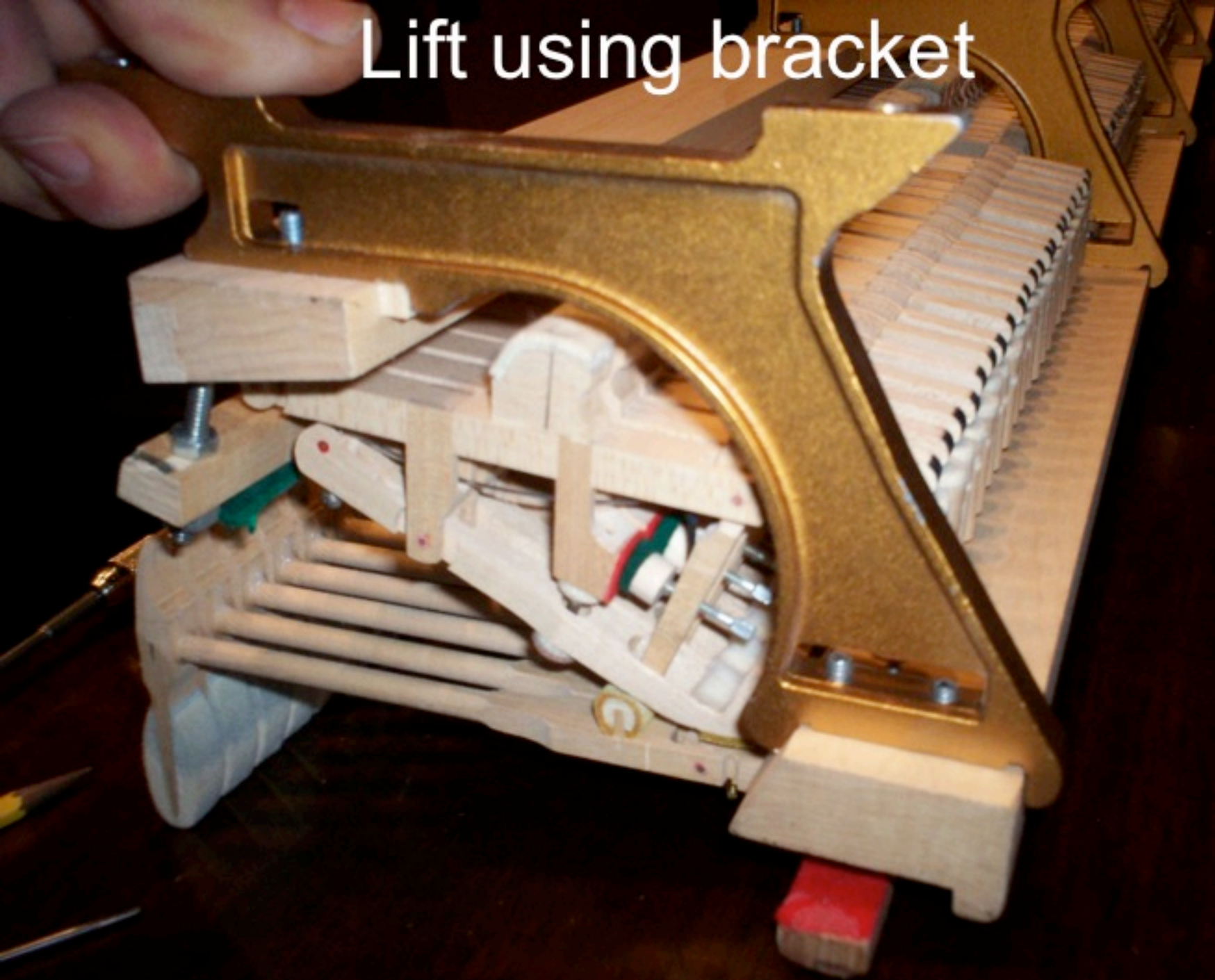
- Travel ensures the hammer moves directly to the string, reduces wobble
- Travel provides a foundation for squaring
- Squaring balances the mass of the hammer on the shank

Travel shanks position





Lift using bracket

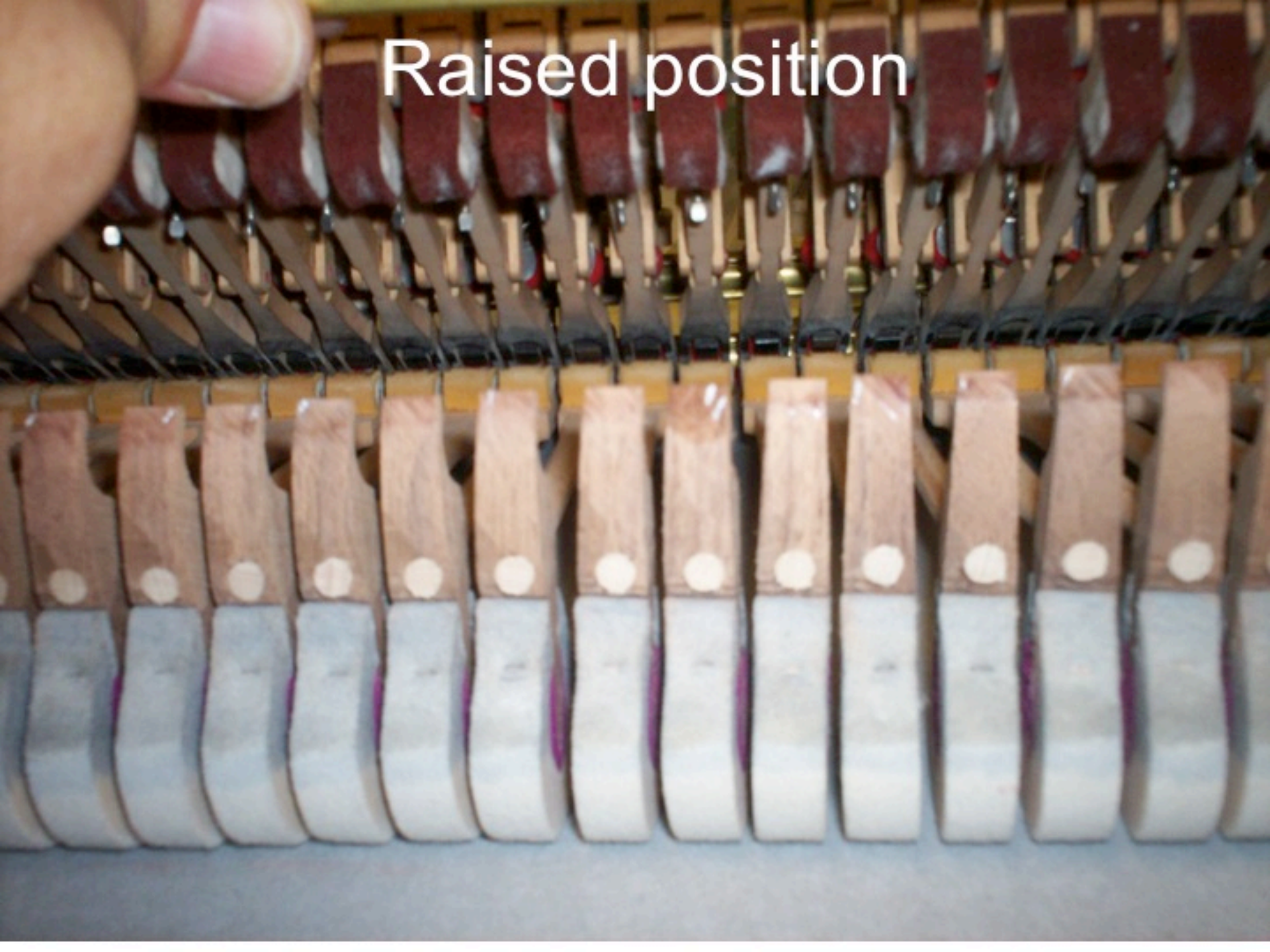


View from front

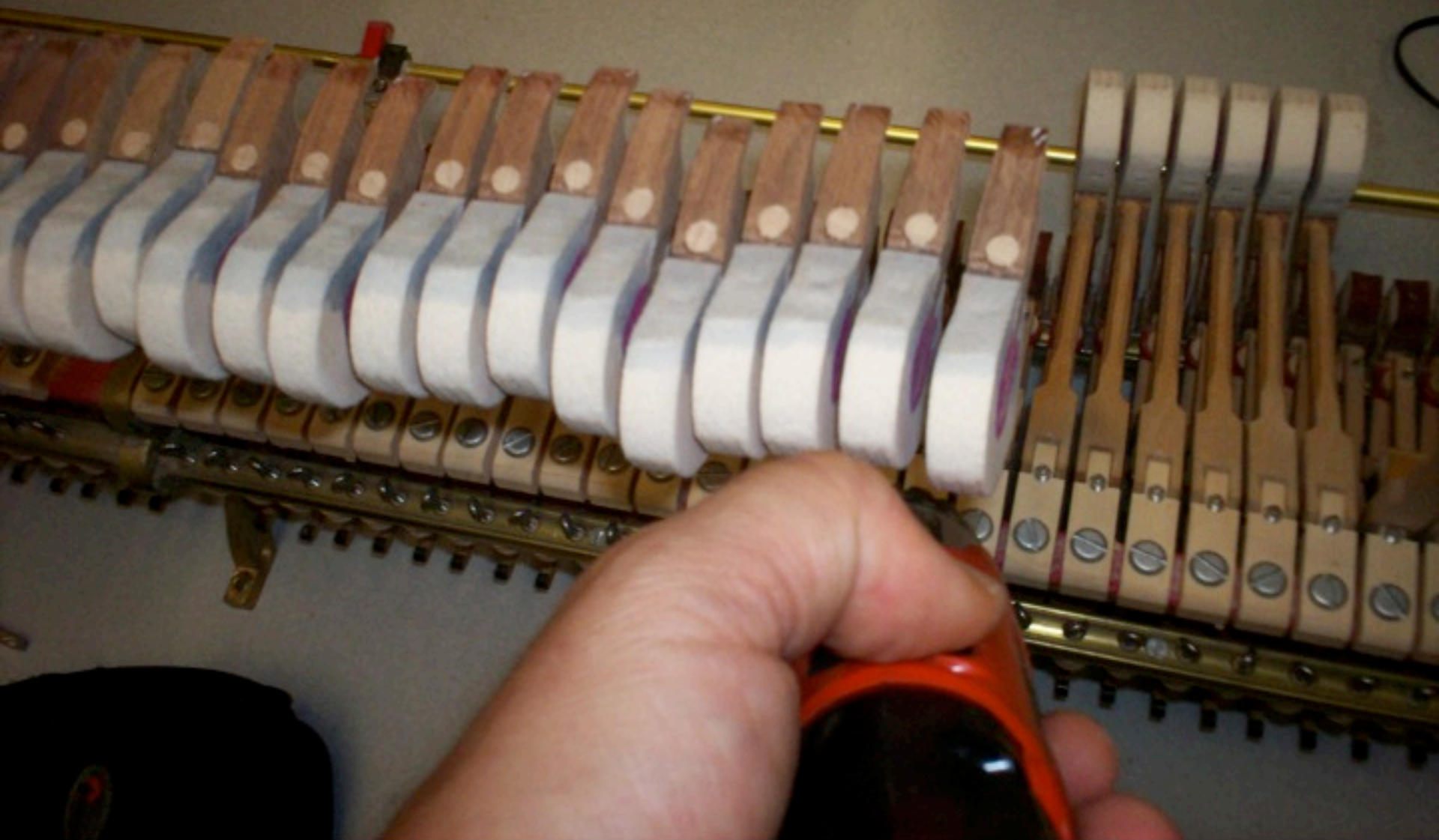




Raised position



After marking, remove shanks





Travel paper

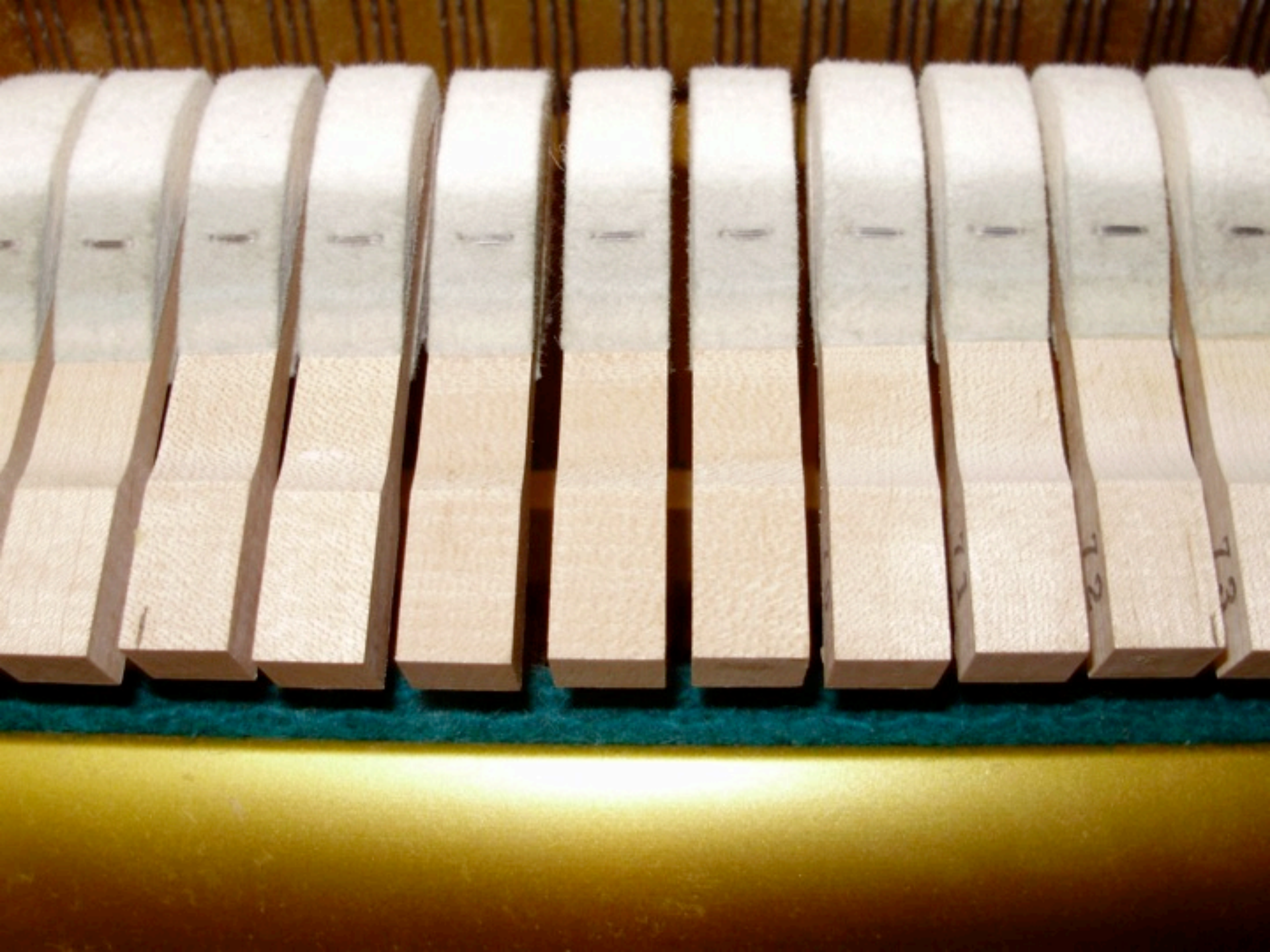














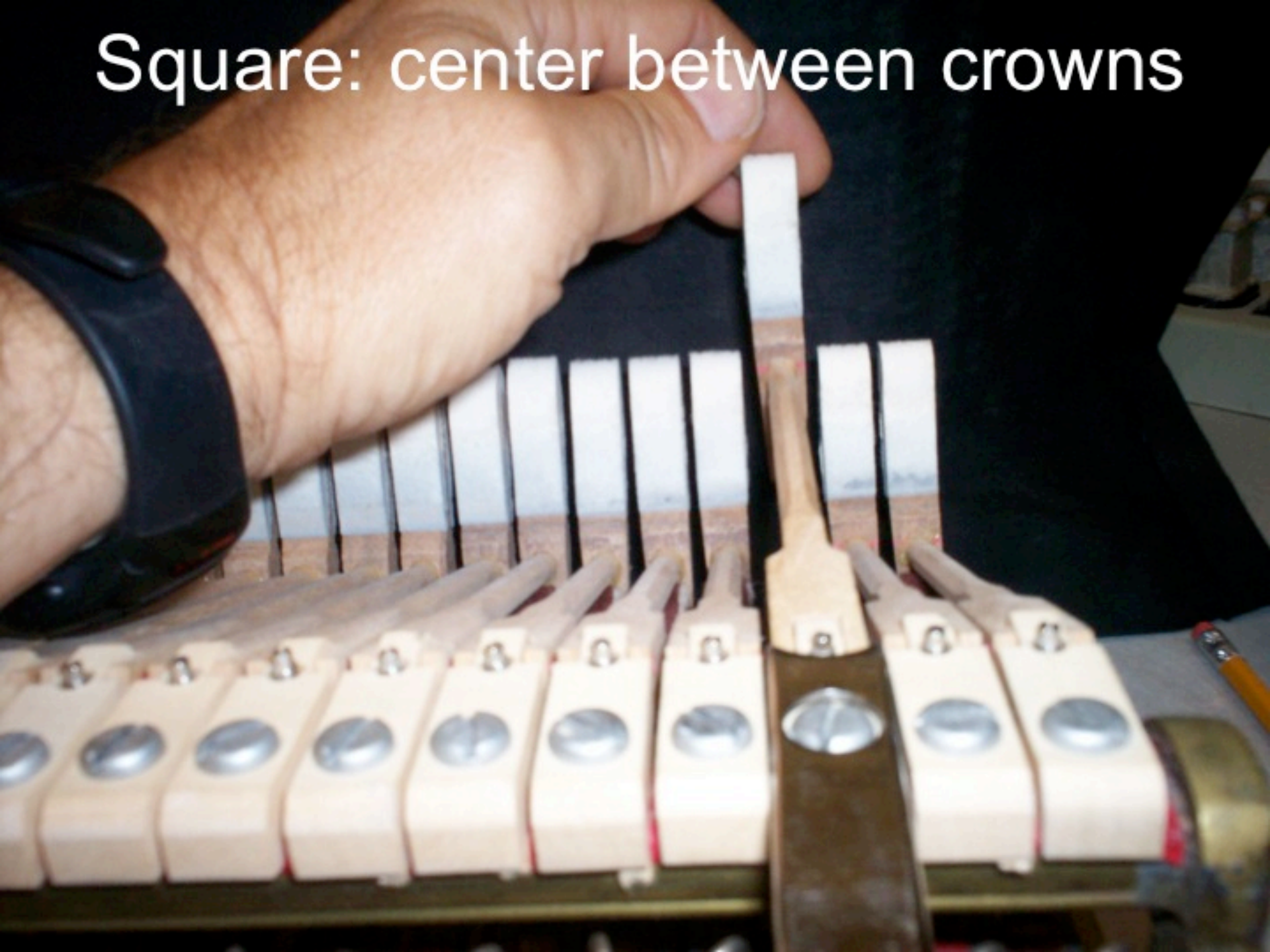




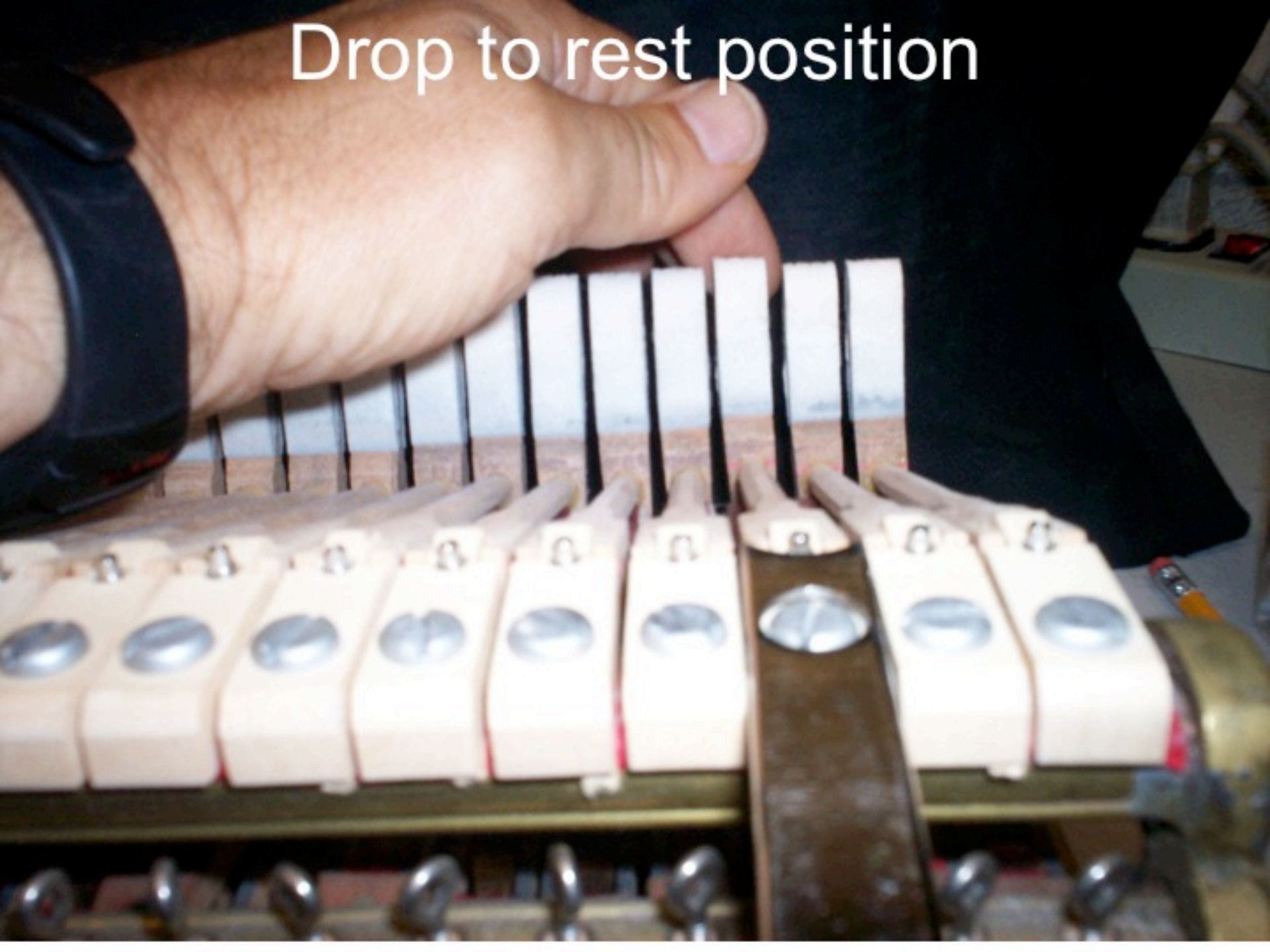




Square: center between crowns

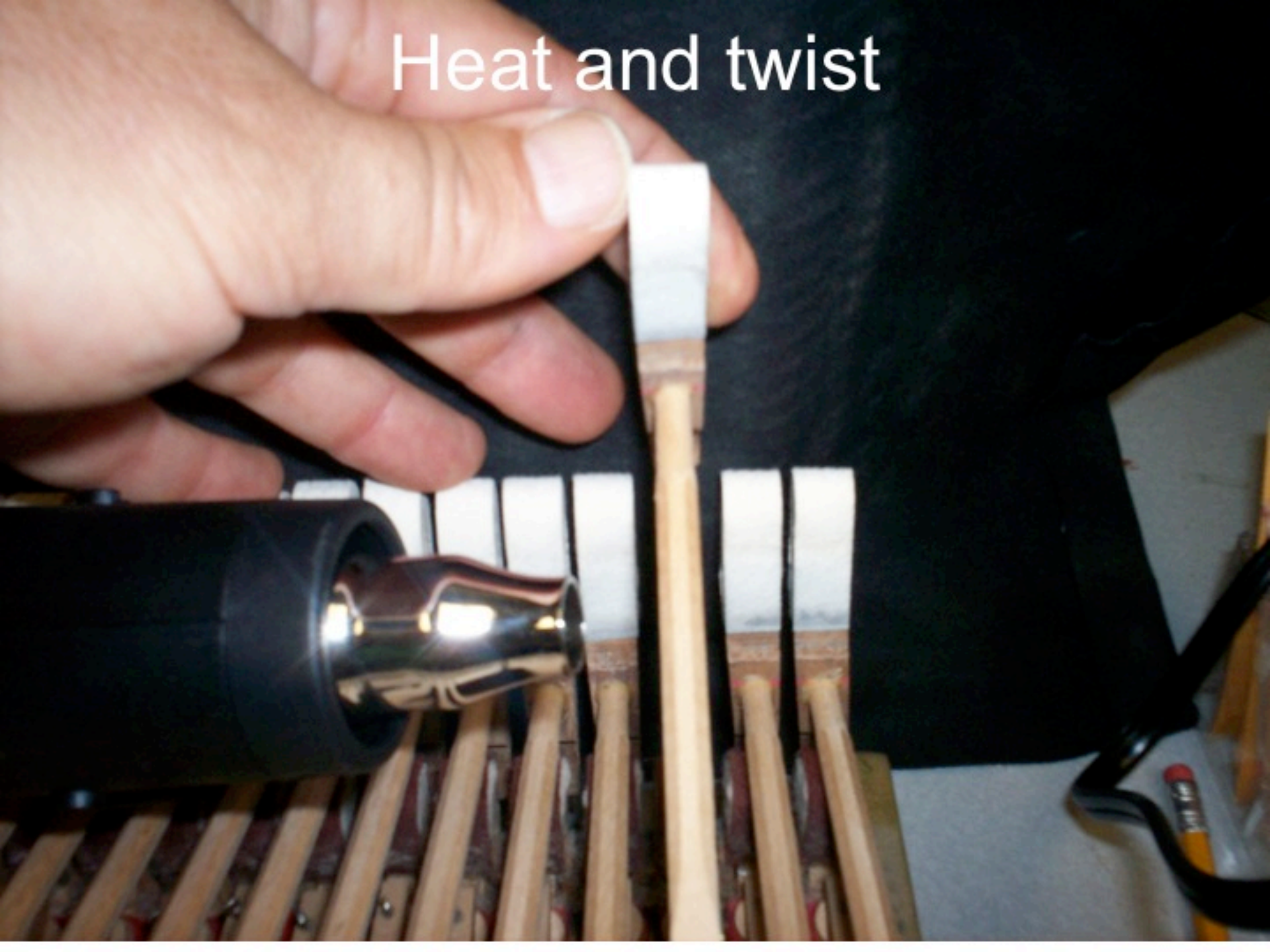


Drop to rest position

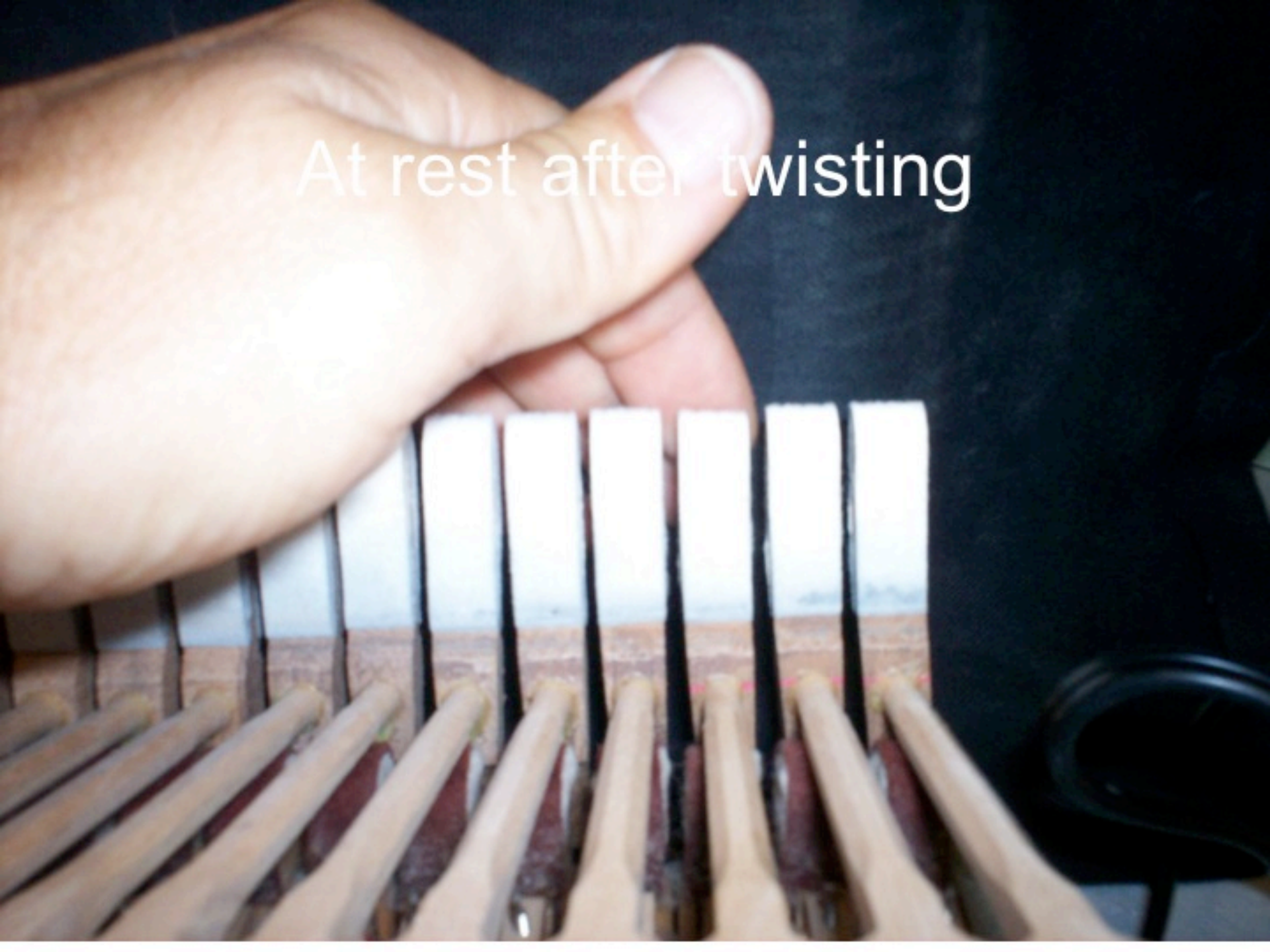




Heat and twist

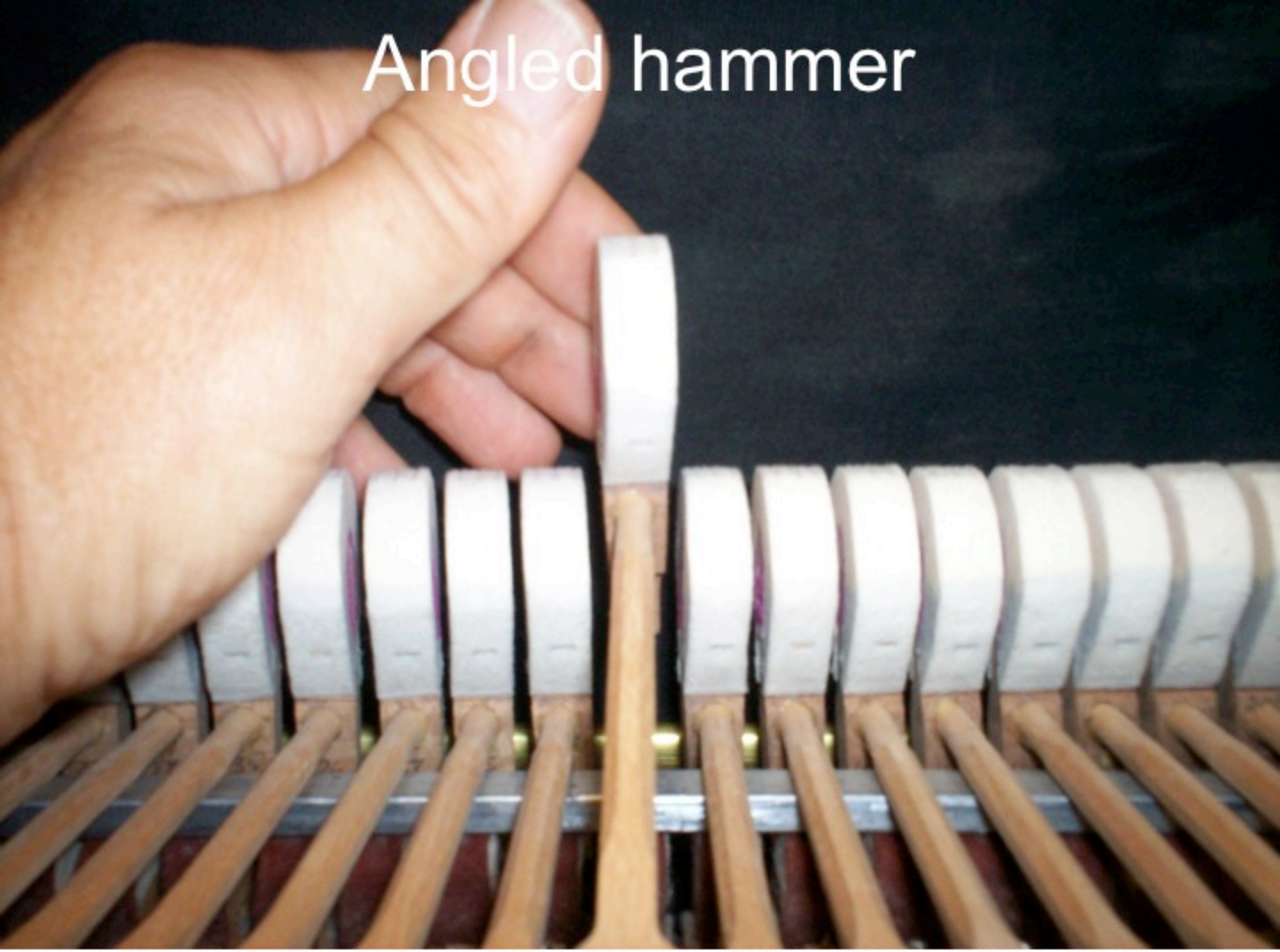


At rest after twisting

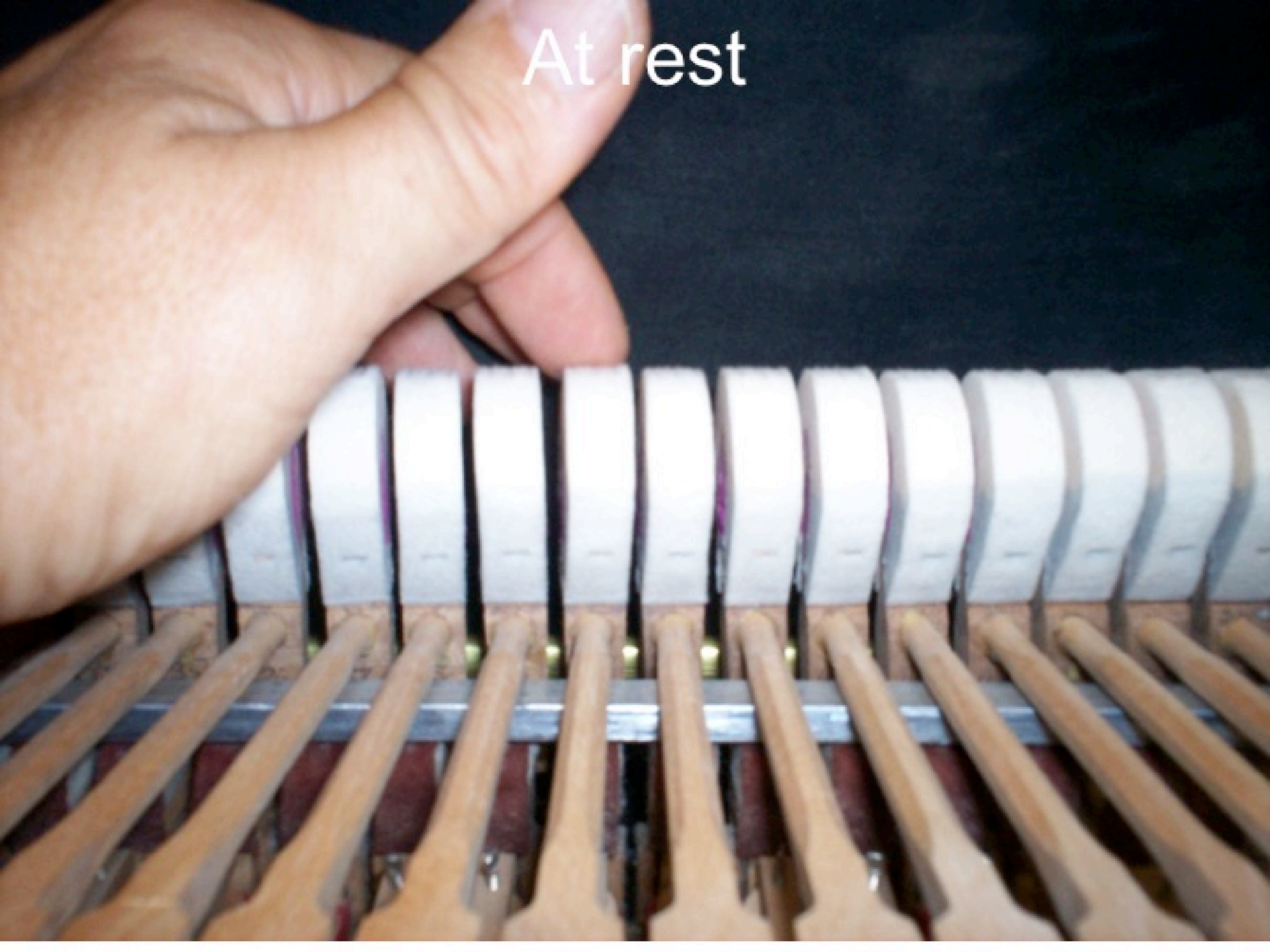




Angled hammer



At rest















# Jig for new hammers

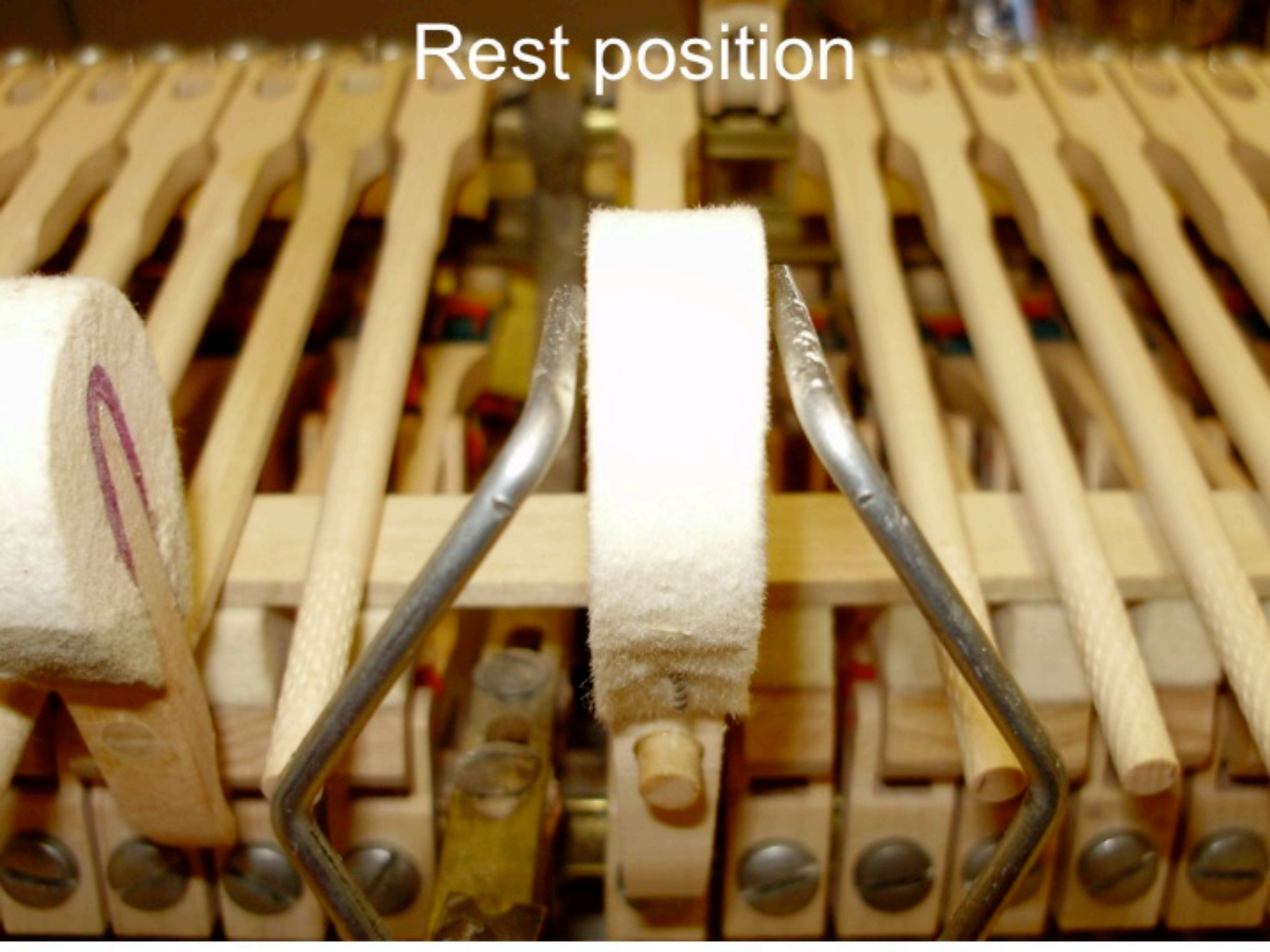




Jig with hammer up



Rest position

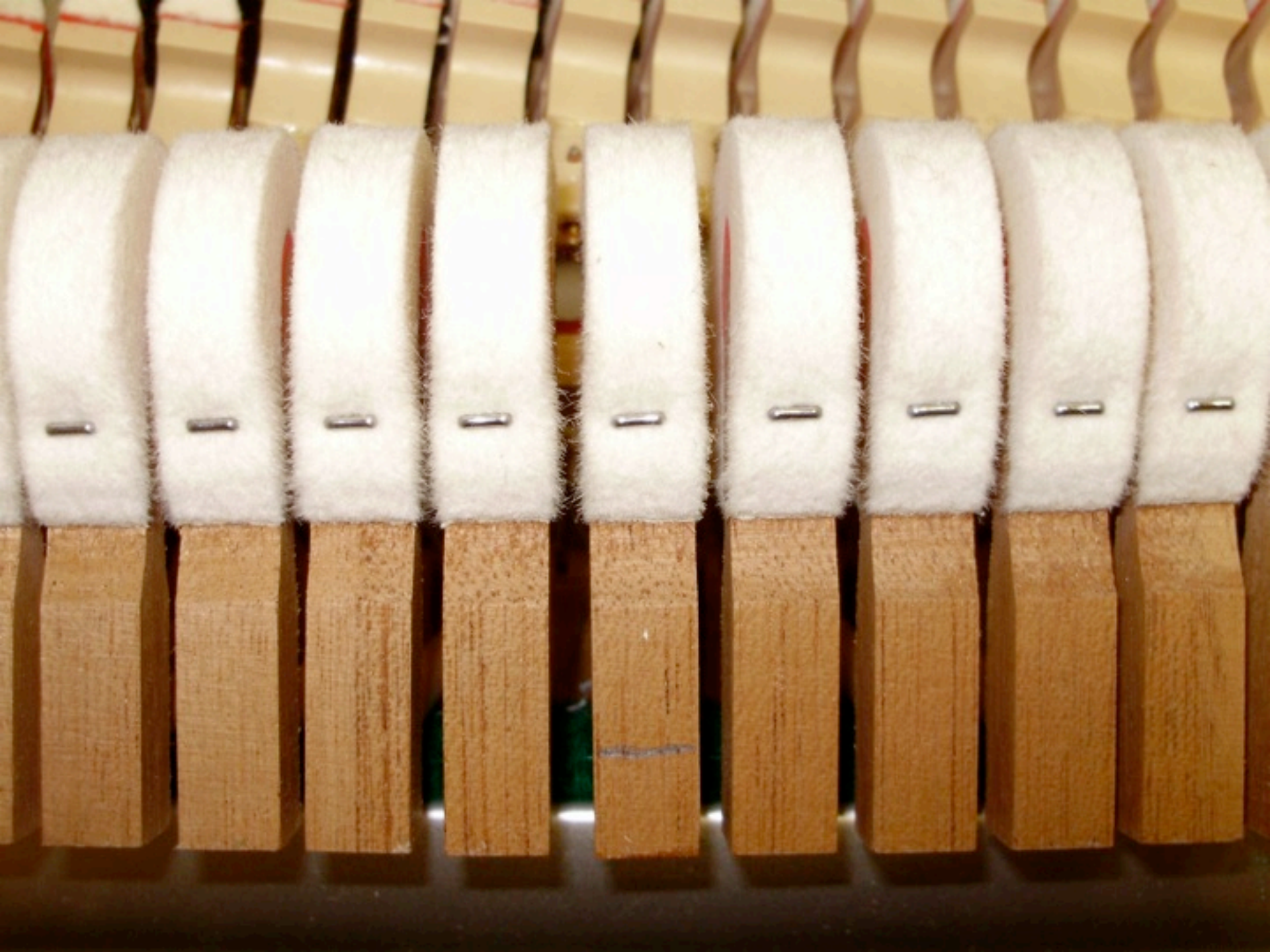






































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# Leveling strings

- Efficient way to prepare for hammer mating
- Having three strings in the same plane is more important than level per se
- Don't over bend strings

String level, tall

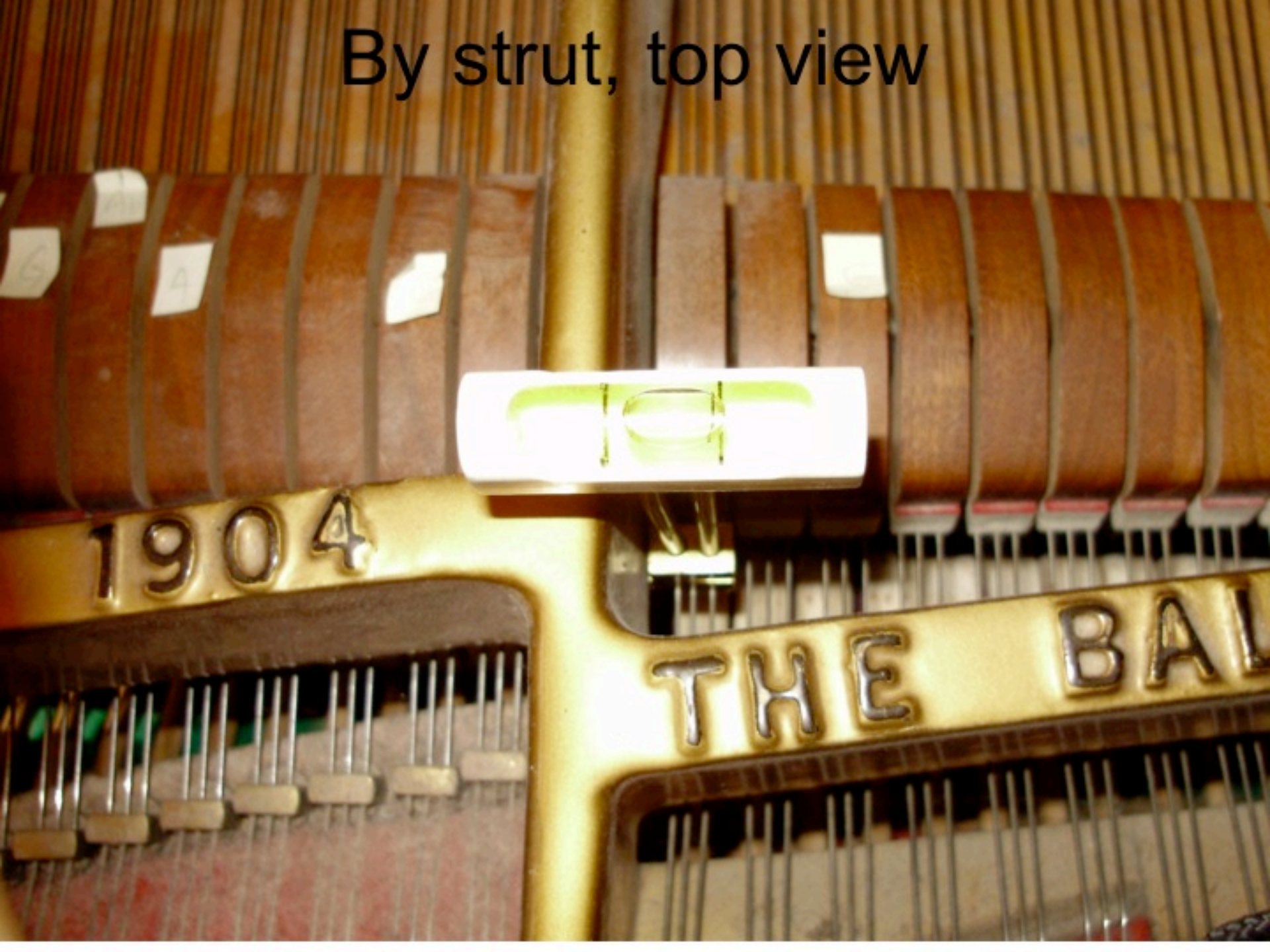




By strut



By strut, top view





# String levels



String level by strut - narrow







Damper clearance

































# Mating hammers to strings

- The hammer must be pressed very lightly to the string, as naturally as possible
- Aim for a somewhat “wet” sound when plucking, distinguishing between degrees of wetness.

































