

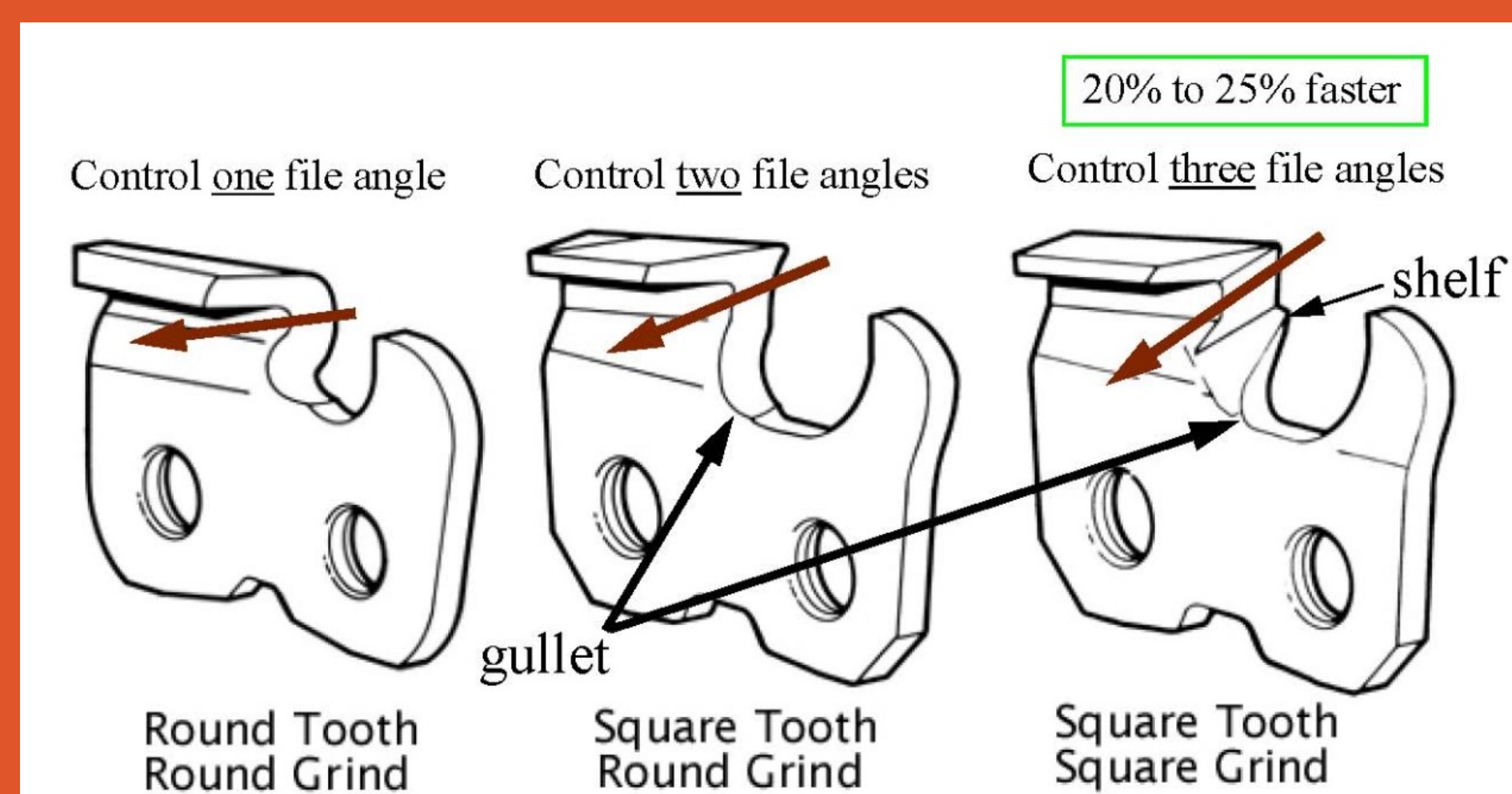
BACKGROUND

- There is no sharpeners that can make the angled gullet for chains in the market.
- Sharpening an angled gullet by hand is difficult and requires a machine to sharpen



ANGLED GULLET

- Studies shows that angled gullets cuts logs faster than regular round gullets



CHAIN SAW CHAIN SHARPENER

Advisor: Scott Campbell and Nathan Algarra

Team Members: Porter Bovee, Justin Giang, Cole Laureano, and Tyler Nielsen



OPERATION PROCEDURE

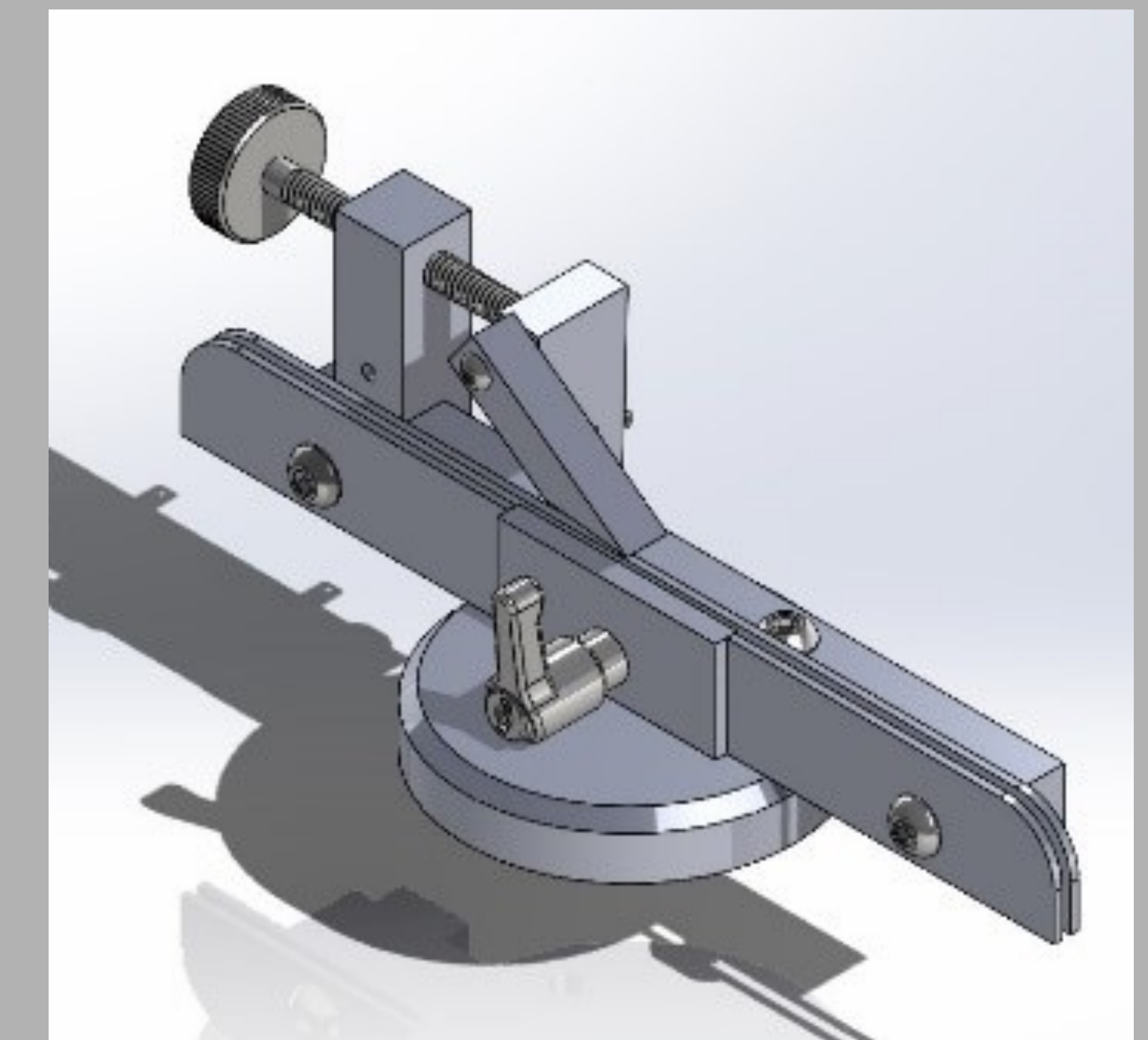
1. Insert the chain in the gap between the guiding rails
2. Clamp the chain with the adjustable knob
3. Rotate indexer to desired angle
4. Turn on the machine with forward or backward motion

MACHINE SPECIFICATIONS

- Motor Reversibility: The motor can make the grinder go clockwise and counterclockwise.
- Simple manufacturing in the workshop
- Motor speeds at around 1725 RPM
- Adjustable tooth grind length adjustment of 10 mm
- Indexer rotation that turns at 35° angle

REDESIGNED INDEXER

- More durable and rigid than the last indexer
- Changed clamping mechanism to ensure that chains does not move during operation.



FUTURE WORK

- Work on hinges
- Work on handguard to accommodate 7 inches grind discs instead of 8 inches discs

Acknowledgements

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