

• **FOR STRONG, RAPID, RELIABLE, NONPROGRESSIVE RAIL JOINERY** •

**Gear Head Screw**  
GHS-1/ 1/4-20

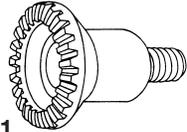


Fig. 1

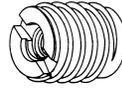


Fig. 2

**Wood Insert**  
WI500x625/ 1/4-20

**Used on:** stair rails, KD furniture, store fixtures, and special assemblies.

These Gear Head Screws are operated from 90°, replacing hanger bolts, ball nuts, etc. They are easier to install, easier and quicker to operate and tighten, and perhaps most importantly, they permit **nonprogressive assembly**.

**ADVANTAGES**

- Gear Head Screws can be retracted flush for nonprogressive assembling/disassembling.
- Strong, tight joints are made.
- Preparation of joined members is simple.
- Easy installation.
- Operated from 90°.
- Quick, uninterrupted operation is accomplished when turning the G.H. Screw.
- Close quarter joints can be made.
- Economical due to time saving.
- Easier to use than hanger bolts, etc..
- Geared tool & G.H. screw tooth engagement is positive.
- A ratchet wrench or 'spin-tight' can be used to tighten the Gear Head Screw.
- Facilitates angular component assemblies previously not feasible.
- Easily removed if required.

**Typical Assemblies**

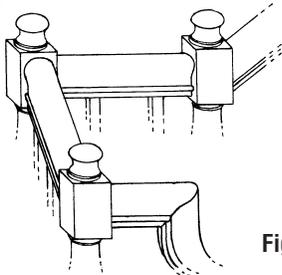


Fig. 3

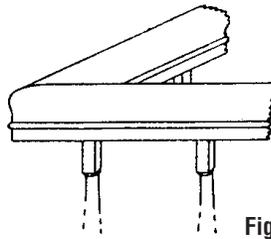


Fig. 4

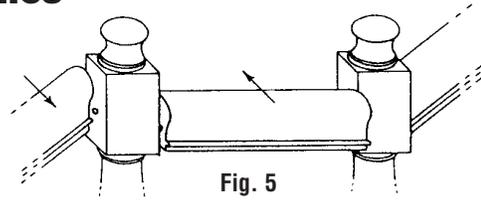


Fig. 5

Sections being added as above are slid into place in their own length - **nonprogressively** - because the Gear Head Screw is retractable. (See TDS/GHS-221-2 & 3)

Stair rail joints are an ideal application for the gear head screw. Many configurations can be assembled **nonprogressively**.

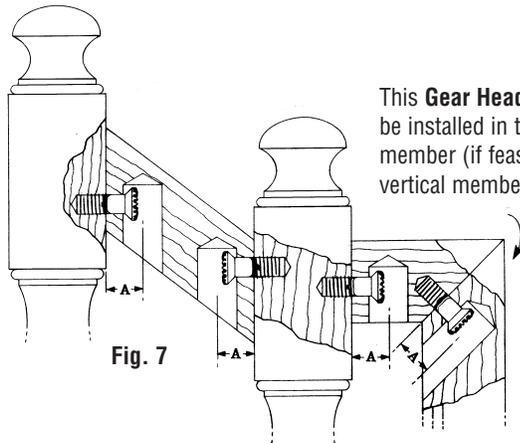


Fig. 7

This Gear Head Screw may be installed in the horizontal member (if feasible). Or in the vertical member as shown here.

**Shown here are installation methods for typical stair rail joints.**

A = .937"/23.8mm for Gear Head Screw Part No: **GHS-1/ 1/4-20**

For further installation details see **TDS/GHS 221-2 & 3.**

**- Patented -**

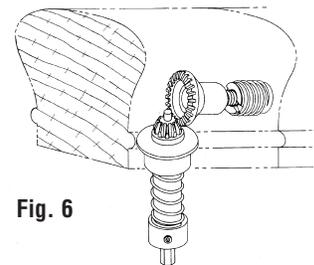


Fig. 6

Here the **Gear Head Screw** and wood insert are being tightened with the installation tool.

Tool engagement and tightening is uninterrupted, therefore, rail joining is accomplished rapidly. A ratchet wrench can be used for tightening.

The special design of the wood insert achieves a strong positive hold - **even in end grain**.

These 90° operated gear head screws are easy to install, easy to tighten, and you can put your stair rail sections in place nonprogressively (in their own length), in either straight butt joints or angular joints, because the G.H. Screws can be retracted flush when assembling. (See TDS/GHS-221-3).