



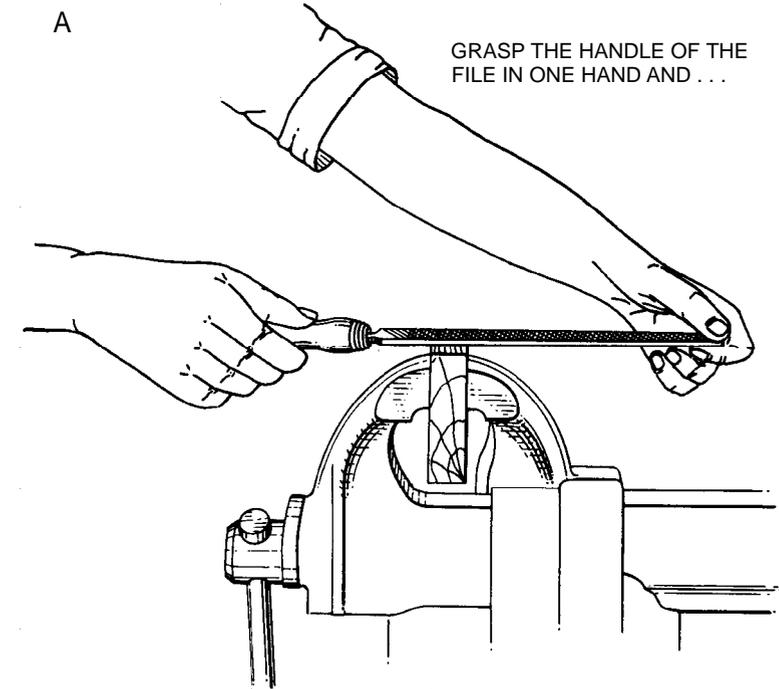
### How To Use Files (Metal or Wood)

Your tool kit should always include a variety of files and handles to match. They are used for smoothing, cutting, or removing small amounts of metal and wood. They come in a variety of shapes and sizes, and each one is designed to perform a specific type of work. The practice recipe below is designed for all types of files, and you would do well to become acquainted with as many types as possible to see what each can do. Caution: Never use a file without a tight-fitting handle. It can result in serious injury.

Utensils  
Table vise  
File(s) and hand/e(s)  
Chalk  
File brush

Ingredients  
Several blocks of wood  
2 2" inch dowels or old broom handle  
Several pieces of metal pipe

1. Insert block of wood in vise.
2. Grasp the handle of the file in one hand (Fig. 7A).
3. Grasp the point of the file in the other hand.
4. Place the middle of the face of the file on the wood.
5. The first stroke should be started with light pressure near the point of the file.
6. Push file across wood and increase pressure as you go, so that each file tooth will do its share of the job.
7. When the file is pushed all the way across the surface of the wood, raise file and start all over. Never use pressure on return stroke. Make sure your strokes are slow and steady. Too much speed will cause your file to "rock," and that will round off the edges of your wood.
8. As you file, the teeth of the file will clog up with some of the wood shavings and prevent efficient filing. This is known as "pinning." Rubbing chalk between the teeth of the file can help to prevent this condition. But, better clean the file frequently with a brush, as shown in Figure 7B. Brush with a pulling motion parallel to the rows of teeth, diagonally across the file, not up-and-down the length of the file.
9. Clean the file after fifteen strokes and alter your angle of filing at the same time.
10. Now repeat entire process with dowels or broom handle, so that you get practice in filing a rounded surface.
11. Repeat entire practice procedure on metal.



GRASP THE POINT OF THE FILE IN THE OTHER HAND

B

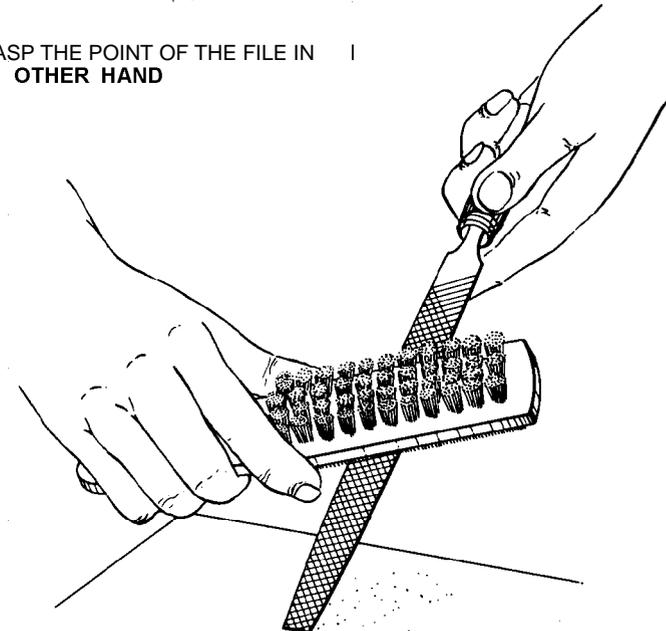


Figure 7.  
The File