

- PA-6692-L-10 INTERIOR VIEW, MACHINE SHOP, FROM THE SOUTH SIDE OF THE GALLERY.
- PA-6692-L-11 INTERIOR VIEW, MACHINE SHOP, FROM THE SOUTH SIDE OF THE GALLERY (NOTE THE EXPOSED STEEL CONSTRUCTION AND THE CLERESTORY WINDOWS).
- PA-6692-L-12 INTERIOR VIEW, MACHINE SHOP, SOUTH WALL.
- PA-6692-L-13 INTERIOR VIEW, MACHINE SHOP, TYPICAL LATERAL BAY SHOWING THE FIRST AND SECOND LEVELS AND THE CLERESTORY (NOTE THE CHAIN AND PULLEY SYSTEM FOR OPENING THE WINDOWS).
- PA-6692-L-14 INTERIOR VIEW, EAST GALLERY FROM THE SOUTH
- PA-6692-L-15 INTERIOR DETAIL, DRILL PRESS, MACHINE SHOP. IN THE PRODUCTION OF CIRCULAR SAW BLADES, AFTER THE A CIRCULAR PIECE OF STEEL IS SHAPED, A HOLE IS PRECISELY CUT THROUGH THE CENTER USING A DRILL PRESS.
- PA-6692-L-16 INTERIOR DETAIL, TOOTHING MACHINE, MACHINE SHOP. THE TOOTH-CUTTING STAGE IN THE CREATION OF LARGE CIRCULAR SAW BLADES OCCURS EARLY IN THE PROCESS, AFTER THE STEEL IS CUT INTO A CIRCLE. THE TOOTHING MACHINE CHOPS OUT V-SHAPED WEDGES TO FORM THE BLADE.¹
- PA-6692-L-17 CLOSER DETAIL OF THE TOOTHING MACHINE.
- PA-6692-L-18 INTERIOR DETAIL, ANNEALING FURNACES, TREATMENT SHOP. THE TEETH ARE CUT INTO STEEL WHICH IS UNTREATED AND "IN THE SOFT." AFTER CUTTING, THE BLADES ARE ANNEALED OR TEMPERED IN ORDER TO GIVE THE BLADES "ELASTICITY," "DURABILITY," AND STRENGTH.

¹All information about industrial process is drawn from the photographer's notes and Philip Scranton and Walter Licht, *Work Sights: Industrial Philadelphia, 1890-1950* (Philadelphia: Temple University Press, 1986), 172-174.

- PA-6692-L-19 INTERIOR DETAIL, ANNEALING PROCESS, TREATMENT SHOP. IN THIS VIEW, A WORKER IS MOVING A HOT BLADE FROM THE FURNACE TO THE "QUENCH TANK," IN WHICH THE BLADE WILL BE RAPIDLY COOLED. THE ANNEALING PROCESS CONCLUDES WITH REHEATING THE BLADE, AND ALLOWING IT — THIS TIME — TO MORE SLOWLY AIR COOL.
- PA-6692-L-20 MARK WARD, A SKILLED METAL SMITH, AND HIS ASSISTANT, ED ANICK, STAND IN THE SMITHING SHOP.
- PA-6692-L-21 INTERIOR DETAIL, SMITHING SHOP, WARD AND ANICK TENSION A DIE CUTTING PLATE. DIE CUTTING OR BLANKING IS THE "CUTTING OF PLASTIC OR METAL SHEETS INTO SHAPES BY STRIKING WITH A PUNCH."²
- PA-6692-L-22 INTERIOR DETAIL, SMITHING SHOP, MARK WARD AND ED ANICK CHECK THE DIE CUTTING PLATE FOR FLATNESS.
- PA-6692-L-23 DETAIL, THE TOOLS OF A SKILLED METAL SMITH.

²"Blanking," *McGraw-Hill Dictionary of Engineering* (New York: McGraw-Hill, 1997), 61.