

HAER
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HISTORIC AMERICAN ENGINEERING RECORD

MASTER PROJECT RECORD

PA-14

Gruber Wagon Works, 1882, 1906

State Route 183 at
State Hill Road
Bernville vicinity (Pleasant Valley)
Berks County
Pennsylvania

- PA-14-1 Photocopied July 1973 from original belonging to Franklin P. Gruber, Reading, Pennsylvania, c. 1895. LOOKING SOUTHWEST. THE "NEW SHOP" AS BUILT BY THE GRUBERS AT THE PRESENT SITE IN 1883.
- PA-14-2 Wm. Edmund Barrett, Photographer, July 1973. VIEW LOOKING WEST.
- PA-14-3 Wm. Edmund Barrett, Photographer, July 1973. WORKS LOOKING SOUTHEAST FROM ACROSS THE ORIGINAL ROAD TO READING.
- PA-14-4 Photocopied July 1973 from an original belonging to Franklin P. Gruber. THE WORKS IN A VIEW c.1960. GRUBER HOUSE VISIBLE IN THE BACKGROUND.
- PA-14-5 Wm. Edmund Barrett, Photographer, July 1974. VIEW LOOKING SOUTHWEST.
- PA-14-6 Wm. Edmund Barrett, Photographer, July 1974. THE IRON SHED, LOOKING SOUTH.
- PA-14-7 Photocopied July 1973 from original owned by Franklin P. Gruber. VIEW OF GRUBER HOUSES AND WAGON WORKS c.1910.
- PA-14-8 Wm. Edmund Barrett, Photographer, July 1973. VIEW OF WEST END OF WORKS, SHOWING LEFT-TO-RIGHT: ELEVATOR, GABLED END OF ORIGINAL BUILDING, TWO-STORY 1905 ADDITION, AND BLACKSMITH SHOP ADDITIONS.
- PA-14-9 Wm. Edmund Barrett, Photographer, July 1974. SOUTH SIDE OF THE WORKS, SHOWING RIGHT-TO-LEFT: 1885 ADDITION TO THE PRE-1883 FARM SHOP, TWO-STORY 1905 ADDITION, ONE STORY ADDITION OF 1908, AND IRON SHED.

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- PA-14-10 Wm. Edmund Barrett, Photographer, July 1974.
VIEW OF THE WORKS LOOKING NORTHWEST.
- PA-14-11 Wm. Edmund Barrett, Photographer, August 1974.
VIEW OF THE OFFICE (1905), LOOKING EAST.
- PA-14-12 Wm. Edmund Barrett, Photographer, August 1974.
VIEW OF THE OFFICE LOOKING WEST.
- PA-14-13 Wm. Edmund Barrett, Photographer, July 1974.
VIEW LOOKING NORTHWEST, SHOWING OUTHOUSE AND,
UNDER THE RAIL TO THE RIGHT, THE TAIL RACE OF THE
ORIGINAL PRIME MOVER FOR THIS PLANT, THE 1884
"RELIANCE" TURBINE.
- PA-14-14 Wm. Edmund Barrett, Photographer, June 1974.
VIEW OF THE ENGINE ROOM, LOOKING NORTH, SHOWING THE
OTTO GASOLINE ENGINE, THE DRIVE PULLEY IS BARELY
VISIBLE TO THE LEFT OF THE FLYWHEEL.
- PA-14-15 Wm. Edmund Barrett, Photographer, June 1974.
ENGINE ROOM, VIEW LOOKING NORTHWEST SHOWING THE
OTTO GASOLINE ENGINE.
- PA-14-16 Wm. Edmund Barrett, Photographer, June 1974.
BASEMENT, VIEW LOOKING SOUTHWEST, SHOWING THE MAIN
LINE SHAFT COMING THROUGH THE WALL FROM THE OTTO
ENGINE.
- PA-14-17 Wm. Edmund Barrett, Photographer, June 1974.
BASEMENT, VIEW LOOKING SOUTHWEST.
- PA-14-18 Wm. Edmund Barrett, Photographer, June 1974.
BASEMENT, VIEW LOOKING NORTHWEST, SHOWING BELTING
AND ENGAGING MECHANISM FOR DRIVING THE TABLE SAW.
- PA-14-19 Wm. Edmund Barrett, Photographer, June 1974.
BASEMENT, VIEW LOOKING NORTHWEST AT PULLEYS WHICH
DRIVE TABLE SAW (LEFT) AND JOINTER (RIGHT).
- PA-14-20 Wm. Edmund Barrett, Photographer, June 1974
BASEMENT, VIEW LOOKING SOUTHWEST, BELTING AND
ENGAGING MECHANISM.

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- PA-14-21 Wm. Edmund Barrett, Photographer, August 1974.
BENCH SHOP, NORTH WALL WITH WHEELWRIGHTS' BENCHES
AND PATTERN MOUNTED ON THE SECOND-FLOOR JOISTS.
- PA-14-22 Wm. Edmund Barrett, Photographer, August 1974.
BENCH SHOP, EAST WALL VIEW SHOWING HINGED PANEL
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- PA-14-23 Wm. Edmund Barrett, Photographer, August 1974.
BENCH SHOP, VIEW OF THE NORTHEAST CORNER AND
WHEELPIT.
- PA-14-24 Wm. Edmund Barrett, Photographer, July 1974.
BENCH SHOP, VIEW OF THE SOUTHEAST CORNER. NOTE
VARIOUS METHODS OF STORING TOOLS AND THE ELECTRICAL
SYSTEM.
- PA-14-25 Wm. Edmund Barrett, Photographer, August 1974.
BENCH SHOP, VIEW LOOKING SOUTHWEST. THE WORKS
WERE HEATED THROUGHOUT WITH WOOD STOVES, THIS ONE
BEING THE MOST ELABORATE.
- PA-14-26 Wm. Edmund Barrett, Photographer, July 1974.
BENCH SHOP, VIEW LOOKING SOUTH, SHOWING THE BORING
MACHINE PURCHASED IN 1885. THE BIT MAY BE LOWERED
BY THE HANGING LINKAGE OR THE TABLE RAISED BY THE
FOOT PEDAL. NOTICE THE CHASE FOR THE BELTS,
BUILT NO LESS CAREFULLY THAN THE MACHINE ITSELF.
- PA-14-27 Wm. Edmund Barrett, Photographer, August 1974.
BENCH SHOP, VIEW LOOKING NORTHWEST, SHOWING THE
L. POWERS & CO. JOINTER AND ITS BELT CHASE, THE
PATTERNS, THE GRUBER-BUILT WHEEL BARROW, AND JACOB
H. GRUBER'S WHEELWRIGHT BENCH.
- PA-14-28 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING EAST AT THE DOOR TO THE
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EACH SIDE OF THE JAMB SECTIONS MAY BE REMOVED TO
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- PA-14-29 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING SOUTHEAST AT THE BELT CHASE
FOR THE TRANSMISSION OF POWER FROM THE MAIN LINE-
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- PA-14-30 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING EAST, SHOWING THE WOOD-
TURNING LATHE AND THE SPOKE CUT-OFF SAW MOUNTED
ON ITS WAYS.
- PA-14-31 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING NORTHEAST, SHOWING THE
WOOD-TURNING LATHE, THE GRUBER-BUILT SPOKE-TENONING
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- PA-14-32 Wm. Edmund Barrett, Photographer, June 1974
WOOD SHOP, VIEW LOOKING SOUTHEAST, SHOWING GRUBER-
BUILT SPOKE-TENONING MACHINE.
- PA-14-33 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, SOUTHEAST CORNER.
- PA-14-34 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING EAST, SHOWING DETAILS OF
JOHN GLEASON SPOKE LATHE.
- PA-14-35 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING SOUTHWEST, SHOWING THE
GRUBER-BUILT DADO CUTTING MACHINE ORIGINALLY
LOCATED IN THE BENCH SHOP. CORNER IS DEVOTED TO
STORAGE OF MATERIALS.
- PA-14-36 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING SOUTHEAST, SHOWING THE FRANK &
CO. EUREKA BAND SAW WITH ITS WOODEN CASE AND THE BELT
FROM THE LINESHAFT BELOW WHICH POWERS THE TABLE-SHAPER.
- PA-14-37 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING NORTHWEST, SHOWING THE PLANER
WITH ITS BELT CHASE FROM THE BASEMENT LINESHAFT AND
THE BELTING SYSTEM FOR THE TABLE-SHAPER. BEYOND
THE PLANER IS THE BAND SAW.
- PA-14-38 Wm. Edmund Barrett, Photographer, July 1974.
WOOD SHOP, VIEW LOOKING SOUTHEAST.

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- PA-14-39 Wm. Edmund Barrett, Photographer, July 1974. WOOD SHOP, VIEW LOOKING NORTHWEST, SHOWING (LEFT-TO-RIGHT): GRUBER-BUILT HUB-BORING MACHINE, MORTISING MACHINE, AND GRUBER-BUILT BELT-SANDER: ALL ARE POWERED FROM LINESHAFTING IN THE BLACKSMITH SHOP.
- PA-14-40 Wm. Edmund Barrett, Photographer, July 1974. WOOD SHOP, VIEW LOOKING SOUTHWEST, SHOWING GRUBER-BUILT HUB-BORING MACHINE.
- PA-14-41 Wm. Edmund Barrett, Photographer, July 1974. WOOD SHOP, VIEW LOOKING WEST, SHOWING SIDE OF GOODELL & WATERS MORTISING MACHINE.
- PA-14-42 Wm. Edmund Barrett, Photographer, July 1974. WOOD SHOP, VIEW LOOKING NORTHWEST, SHOWING THE FIRST GRUBER-BUILT SANDER AND ITS BELT CHASE (RAISED).
- PA-14-43 Wm. Edmund Barrett, Photogrpaher, July 1974. WOOD SHOP, VIEW LOOKING SOUTHWEST, SHOWING THE GRUBER-BUILT TABLE SAW, c.1885-90. THE POT-BELLIED STOVE IS NOT IN ITS ORIGINAL LOCATION.
- PA-14-44 Wm. Edmund Barrett, Photographer, July 1974. BLACKSMITH SHOP, VIEW LOOKING EAST THROUGH THE DOOR TO THE WOOD SHOP; ON THE LEFT IS THE D. H. POTTS TIRE SHRINKER; TO THE RIGHT OF THE DOOR IS THE BELT CHASE FROM THE BASEMENT LINESHAFT.
- PA-14-45 Wm. Edmund Barrett, Photographer, July 1974. BLACKSMITH SHOP, VIEW LOOKING NORTHEAST, SHOWING BELT CHASE FOR TWO BELTS FROM THE BASEMENT, THE W. E. & J. BARNES CO. DRILL PRESS, AND THE DRILL PRESS USED FOR REAMING. THE BELT PASSING THROUGH THE WALL POWERS THE SANDER IN THE WOOD SHOP.
- PA-14-46 Wm. Edmund Barrett, Photographer, June 1974. BLACKSMITH SHOP, VIEW LOOKING SOUTHEAST, SHOWING PUNCH AND SHEAR MACHINE IN CENTER.

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- PA-14-47 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING SOUTHWEST, SHOWING
THE LINESHAFT ALONG THE SOUTH WALL. MACHINES SHOWN
(LEFT TO RIGHT): WELLS BROS. & CO. BOLT THREAOER,
OEFIANCE MACHINE WORKS POWER PRESS, ANO THE WEST
TIRE SETTER.
- PA-14-48 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING NORTHWEST, SHOWING
THE DOUBLE FORGE ANO THE OPEN AREA USEO FOR ASSEM-
BLING AND IRONING THE WAGONS.
- PA-14-49 Wm. Edmund Barrett, Photographer, July 1974.
BLACKSMITH SHOP, VIEW LOOKING WEST, SHOWING DOUBLE
FORGE, SHEAR, BELT CHASE, AND PART OF THE HAWKEYE
MANUFACTURING CO. FORGE HAMMER. IN THE FOREGROUND
IS THE SWAGE BLOCK.
- PA-14-50 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING NORTHEAST, SHOWING
DOUBLE FORGE, HAWKEYE MANUFACTURING CO. FORGE
HAMMER.
- PA-14-51 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING SOUTH, SHOWING THE
OOUBLE FORGE, HAWKEYE MANUFACTURING CO. FORGE HAMMER.
- PA-14-52 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING EAST, SHOWING BACK OF
OOUBLE FORGE WITH ITS MASS OF TOOLS ANO THE MANORELS
FOR SHAPING THE HUB BANDS.
- PA-14-53 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING EAST.
- PA-14-54 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING EAST, SHOWING PUNCH
ANO ASSOCIATEO BELTING.
- PA-14-55 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING SOUTH, SHOWING
ROGERSFORO POWER PUNCH ANO SHEAR WITH THE TIRE
BENOER AT LEFT.
- PA-14-56 Wm. Edmund Barrett, Photographer, June 1974.
BLACKSMITH SHOP, VIEW LOOKING SOUTH.

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- PA-14-57 Wm. Edmund Barrett, Photographer, August 1974.
ELEVATOR, VIEW LOOKING EAST, SHOWING THE BOTTOM
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- PA-14-58 Wm. Edmund Barrett, Photographer, August 1974.
ELEVATOR, VIEW LOOKING EAST AT ELEVATOR FLOOR.
- PA-14-59 Wm. Edmund Barrett, Photographer, August 1974.
ELEVATOR, VIEW LOOKING NORTHWEST AT OPERATING
MECHANISM (BUILT 1905).
- PA-14-60 Wm. Edmund Barrett, Photographer, August 1974.
ELEVATOR, VIEW LOOKING NORTH FROM THIRD FLOOR,
SHOWING OPERATING MECHANISM.
- PA-14-61 Wm. Edmund Barrett, Photographer, August 1974.
PAINT SHOP, VIEW LOOKING EAST. THE WINDOW IS IN
THE CENTER OF A SLIDING DOOR THAT OPENS ONTO THE
PORCH AT THE EAST END OF THE ORIGINAL 1883 SHOP.
THE DOOR WAS USED FOR HAULING THE WAGONS UP TO THE
PAINT SHOP.
- PA-14-62 Wm. Edmund Barrett, Photographer, August 1974.
PAINT SHOP, VIEW LOOKING SOUTHWEST. (THIS VEHICLE
WAS NOT BUILT BY THE GRUBERS.
- PA-14-63 Wm. Edmund Barrett, Photographer, August 1974.
PAINT SHOP, VIEW LOOKING EAST.
- PA-14-64 Wm. Edmund Barrett, Photographer, August 1974.
WAGON STORAGE, VIEW LOOKING SOUTHWEST, SHOWING
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- PA-14-65 Wm. Edmund Barrett, Photographer, August 1974.
WAGON STORAGE, VIEW LOOKING SOUTHWEST, SHOWING
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- PA-14-66 Wm. Edmund Barrett, Photographer, August 1974.
WAGON STORAGE, VIEW LOOKING EAST. NOTE THREE-LEGGED
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- PA-14-67 Wm. Edmund Barrett, Photographer, August 1974.
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- PA-14-68 Wm. Edmund Barrett, Photographer, August 1974.
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- PA-14-69 Wm. Edmund Barrett, Photographer, August 1974.
WAGON STORAGE, VIEW LOOKING NORTHWEST SHOWING A
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- PA-14-70 Photocopy of an original owned by Franklin P. Gruber.
CUSTOM-BUILT GRUBER WAGON (BEFORE 1905).
- PA-14-71 Photocopy of an original owned by Franklin P. Gruber.
GRUBER-BUILT TRUCK BODY c.192D.
- PA-14-72 Photocopy of an original owned by Franklin P. Gruber.
GRUBER-BUILT TRUCK BODY c.192D.

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Addendum to:
Gruber Wagon Works
State Route 183 at Red Bridge Park
Bernville Vicinity
Berks County
Pennsylvania

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William Edmund Barret, photographer, 1974.

- PA-14-73 GENERAL VIEW LOOKING SOUTH. PAINT AND BENCH SHOP ON LEFT,
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- PA-14-172 ELEVATOR, LOOKING SOUTH AT POINT WHERE ELEVATOR ADDITION OF 1905 MEETS ORIGINAL STRUCTURE.
- PA-14-173 STORAGE ROOM, LOOKING WEST FROM ELEVATOR SHAFT INTO STORAGE AREA ADDED AS PART OF 1905 ELEVATOR ADDITION.
- PA-14-174 STORAGE ROOM, SOUTH WEST CORNER OF STORAGE AREA ADDED AS PART OF 1905 ELEVATOR ADDITION.
- PA-14-175 STORAGE ROOM, SOUTH WALL OF STORAGE ROOM, ADDED WITH ELEVATOR ADDITION OF 1905. WALL IS EXTERIOR OF ORIGINAL WAGON WORKS OF 1883.
- PA-14-176 STORAGE ROOM, EAST WALL. ELEVATOR SHAFT IS VISIBLE THROUGH DOORWAY.
- PA-14-177 ELEVATOR ADDITION OF 1905 IS VISIBLE THROUGH DOORWAYS, STORAGE AREA IS VISIBLE ON LEFT AND ELEVATOR IS ON RIGHT.

PA-14-178 PAINT SHOP, LOOKING SOUTHWEST TOWARD CENTER OF ROOM. OPENING
IN BACKGROUND IS SLIDING WALL.

PA-14-179 PAINT SHOP, SOUTHWEST CORNER.

PA-14-180 PAINT SHOP, SOUTH WALL AT EAST CORNER SHOWING STAIRWELL TO
FIRST FLOOR ON RIGHT, STAIRS TO ATTIC ON LEFT.

PA-14-181 PAINT SHOP, SOUTH WALL SHOWING STAIRWELL LEADING TO FIRST
FLOOR ON LEFT.

PA-14-182 PAINT SHOP, LOOKING DOWNSTAIRS TO BENCH SHOP.

PA-14-183 PAINT SHOP, SOUTH WALL.

PA-14-184 PAINT SHOP, LOOKING NORTHWEST TOWARD CENTER OF ROOM SHOWING
CHIMNEY AND STOVE.

PA-14-185 PAINT SHOP, NORTHWEST CORNER.

PA-14-186 PAINT SHOP, NORTH WALL AT WEST END.

PA-14-187 PAINT SHOP, NORTH WALL AT EAST END.

PA-14-188 WAGON STORAGE AREA, EAST WALL. PAINT SHOP IS VISIBLE THROUGH
DOORWAY.

PA-14-189 WAGON STORAGE AREA, EAST WALL.

PA-14-190 WAGON STORAGE AREA, SOUTH END OF EAST WALL.

PA-14-191 WAGON STORAGE AREA, EAST END OF SOUTH WALL.

PA-14-192 WAGON STORAGE AREA, SOUTH WALL.

- PA-14-193 WAGON STORAGE AREA, WEST WALL.
- PA-14-194 WAGON STORAGE AREA, WEST WALL. CHIMNEY FROM BLACKSMITH FORGE ON FIRST FLOOR IS VISIBLE AT RIGHT.
- PA-14-195 WAGON STORAGE AREA, NORTHWEST CORNER. WINDOW ON RIGHT IS SAME ONE THAT APPEARS IN PA-14-175.
- PA-14-196 WAGON STORAGE AREA, LOOKING TOWARD SOUTHWEST CORNER.
- PA-14-197 WAGON STORAGE AREA, CEILING DETAIL.
- PA-14-198 WAGON STORAGE AREA, CEILING DETAIL.
- PA-14-199 WAGON STORAGE AREA, CEILING DETAIL.
- PA-14-200 WAGON STORAGE AREA, DETAIL OF IRON BAR THAT FORMS QUEEN TRUSS.
- PA-14-201 WAGON STORAGE AREA, CEILING DETAIL.
- PA-14-202 WAGON STORAGE AREA, DETAIL OF IRON BAR THAT FORMS QUEEN TRUSS.
- PA-14-203 ATTIC, AREA OVER WOOD SHOP AND STORAGE AREA LOOKING NORTH. ELEVATOR SHAFT IS AGAINST FAR WALL.
- PA-14-204 ATTIC, LOOKING SOUTH FROM INTERSECTION OF GABLES.
- PA-14-205 ATTIC, DETAIL SHOWING RIDGE AND SHINGLING ON SOUTH ROOF OF ORIGINAL 1883 STRUCTURE.
- PA-14-206 ATTIC, INTERSECTION OF GABLES.
- PA-14-207 ATTIC, INTERSECTION OF GABLES.

- PA-14-208 ATTIC, LOOKING WEST. CHIMNEY FROM BLACKSMITH'S FORGE IS
 VISIBLE AT CENTER.
- PA-14-209 ATTIC, EAST GABLE. STAIRS FROM PAINT SHOP VISIBLE AGAINST FAR
 WALL ON RIGHT SIDE OF PHOTO.
- PA-14-210 GRUBER BUILT TRUCK BODY, CIRCA 1920.
- PA-14-211 GRUBER BUILT TRUCK BODY, CIRCA 1920.
- PA-14-212 GRUBER BUILT TRUCK BODY, CIRCA 1920.
- PA-14-213 GRUBER BUILT TRUCK BODY, CIRCA 1920.
- PA-14-214 GRUBER BUILT TRUCK BODY, CIRCA 1920.
- PA-14-215 GRUBER BUILT TRUCK BODY, CIRCA 1920.