

GEISELL & BAYHA, Philadelphia, Pennsylvania. **PETRY, GEISELL & BAYHA, Philadelphia, Pennsylvania.**

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Hub March 1877 page 481.

The firm of Petry, Geissell, Bayha & Co., of Philadelphia, has dissolved by mutual consent. Two of the partners, Messrs. Geissell & Bayha, have formed a new copartnership, and occupy the old premises on Third-street. We understand that Mr. Petry has retired from active business, but his son, George Petry, has formed a co-partnership with Mr. R. M. Braithwait, under the firm-name of R. M. Braithwait & Co., and opened a new shop in the rear of the premises formerly occupied by Weaver & Lyle, Broad near Race-street. Mr. William Bagley, who had been foreman-painter with the old concern for several years, has gone with Mr. Braithwait.

Petry, Geissell, Bayha & Co., Carriage Builders, Nos. 487 and 489 North Third street, Philadelphia. This establishment dates from December, 1864, when Nicholas Petry, August Geissell and John Bayha associated in partnership under the firm-name of Petry, Geissell & Bayha. Their works were located at Nos. 480 to 486 St. John street, where they started with twelve hands, but the number was soon afterwards increased, as their manufactures were in demand. At the close of the first year, R. M. Braithwait became a member of the firm, when the style was changed to the present one. In the summer of 1870, they erected a four story factory building, 100 feet by 26, in the rear of the original shops, and two years after extended the works through to Third street by the erection of a new wareroom, 74 by 40 feet in dimensions. They now have a front of 40 feet on Third street, with a depth of 225 feet to St. John street, on which they have a frontage of 52 feet. They have a force of eighty-five hands, and employ none but the most skillful artisans. The stock and materials used are the very best the market affords, and are carefully selected by the individual members of the firm, who are all experienced mechanics and contribute their own labor to the production of their manufactures. Their specialty is large or family carriages, turning out about 150 of these yearly, valued at \$250,000. Their carriages are warranted to be equal in style, finish and durability to any made in the country, and they have gained an enviable reputation as the producers of first class work. *Manufacturers of Pennsylvania*, 1875.

August Geissell, of A. Geissell & Sons, 485-489 North Third street, Philadelphia, Pa., was born in Frankfort-on-the-Main, Germany, in 1829. He learned the trade of carriage building in his native city, and came to Philadelphia in 1854, and settled in that city. He at once entered on carriage work, and soon achieved a local reputation for excellent judgment and originality in design. After eleven years, he, with two others, organized the firm of Petry, Geissell & Bayha. Later, R. M. Braithwaite was admitted to the firm, and in 1877, on the withdrawal of Messrs. Petry and Braithwaite, the firm became Geissell & Bayha. This firm was dissolved in 1891 by the death of John Bayha. Soon after, Mr. Geissell admitted his two sons, August, Jr., and Conrad, both of

whom were brought up in the business with that painstaking care which comes from a conscientious regard for foundation principles. Mr. Geissell is an active and progressive carriage builder, and is in sympathy with all advanced ideas and measures for the more complete up-building of his craft. The character and capacity of the man is shown in this creditable fact, that during the industrial depression between 1893-1897, the carriage establishment of A. Geissell & Sons was the only one in Philadelphia that continued in full operation throughout all those years. *Carriage Monthly* July 1889.

In the year 1865 August Geissell founded the Philadelphia carriage company known as Petry, Geissell, Bayha & Co.

The new firm from the very beginning handled only the highest grade of materials obtainable, employed exceptionally skillful workmen, and, under the able direction of the proprietors, soon brought the house into prominence as a producer of coaches, hearses and ambulances.

It was in 1876 that the firm name became Geissell & Bayha, and then, when Mr. Bayha died in 1891, Mr. Geissell's sons became factors in the business. The firm became A. Geissell & Sons, remaining without further change up until the present.

The founder, August Geissell, passed away June 24, 1904. He was born in Frankfort-on-the-Main, Germany, in 1829, coming to America when a very young man.

He was an active member of the Philadelphia Carriage and Wagon Builders' Association...

The Geissell factory was originally located at the corner of St. John and Buttonwood Streets, and although the present plant occupies the same corner, the name of St. John Street was changed many years ago to American Street.

As time went on and business increased, expansion of

the plant became necessary. Additional space was secured by acquiring a number of small properties, among them several shops and stores and an alderman's office, and eventually the plant was extended by an L-shaped addition out to Third Street.

With the addition and the frontages extending along three streets the Geissell concern now owns a very complete four-story plant, comprising more than 45,000 square feet of floor space.

The entire structure has been well-planned for convenience and the expedition of the product through the plant. Nothing has been spared to perfect the equipment in every department for the economical production of the finest work.



August Geissell.
Carriage Monthly, July 1898.

Geissel & Bayha --Petry, Geissel and Bayha, Philadelphia, Pennsylvania

Offices and a spacious show room are located on the Third Street side of the plant. Here are to be seen displays of finished ambulances, funeral cars and funeral directors' service vehicles, ready for immediate delivery. Blacksmithing and general assembly of bodies, mounting, etc., are carried on at the rear of this floor. The second floor is given over entirely to woodworking, all woodworking machines being operated on this floor.

Upholstery and trimming occupy the third floor, while the fourth is devoted to the paint and varnish departments.

A trip through the factory shows that extreme care is taken in the selection of timber; that in the trim shop only genuine curled horsehair of the highest grade is used; that only genuine leather is used in trimming, except in cases where the finer grades of velours are specified. In the paint shop the finish employed on all jobs is the 16-coat system from the primary coats to the finishing varnish.

As the majority of the bodies finished here are hearses and ambulances it is seldom that any other color than black is in demand. Valentine's varnishes are used to obtain the fine finish so essential to funeral-car appearance. Wood carvings for hearses are made at the factory by experts in this line.

Geissel hearses and ambulances are exhibited at all

of their respective trades, they have reached that proficiency and skill which comes only by long association with particular kinds of work.

Geissel employees are hearse and ambulance specialists, with whom it is safe to entrust the most exacting or intricate job.

Occasionally an order comes in the shop for a hearse for use in South and Central American countries. These are elaborate in the extreme, covered with carvings of angels and cupids and much other ornamentation requiring a high measure of specialized skill. But Geissel carvers are equal to this work and eight-inch blocks of the clearest poplar are transformed into the beautiful figures that are so essentially a part of the Latin-American funeral car.

From the inception of the business Geissel products have stood high in material and workmanship. As an instance of the long-sustained reputation of Geissel vehicles they have won a diploma and medal awarded by the Philadelphia International Export Exposition in 1899. Here, in competition with all the coachwork exhibited, Geissel won the first prize on recommendation of the Franklin Institute.

During the first week of March, 1902, Prince Henry of Prussia, brother of the ex-Kaiser of Germany, paid a visit to the United States and spent a portion of his time in Philadelphia. A. Geissel & Sons tendered the distinguished visitor the use of a fine open landau for sight-seeing purposes. The prince personally complimented members of the Geissel firm on the superiority of that carriage and highly commended its riding qualities.

August Geissel, Jr., son of the founder of the house, from the time he came into the business, was greatly interested in the success of the Carriage and Wagon Builders' Association of Philadelphia, which still exists, with a good membership, under the name of Vehicle and Associated Trades of Philadelphia.

Mr. Geissel still devotes much of his spare time to this old organization. He served one term as president, and was the treasurer for many years. He has served as chairman of the entertainment committee for more than a quarter century, supervising all the association's entertain-

ment features, arranging dinners, theater benefits, picnics and seashore excursions. *Motor Vehicle Monthly*, July, 1927 pages 25, 68, 70.



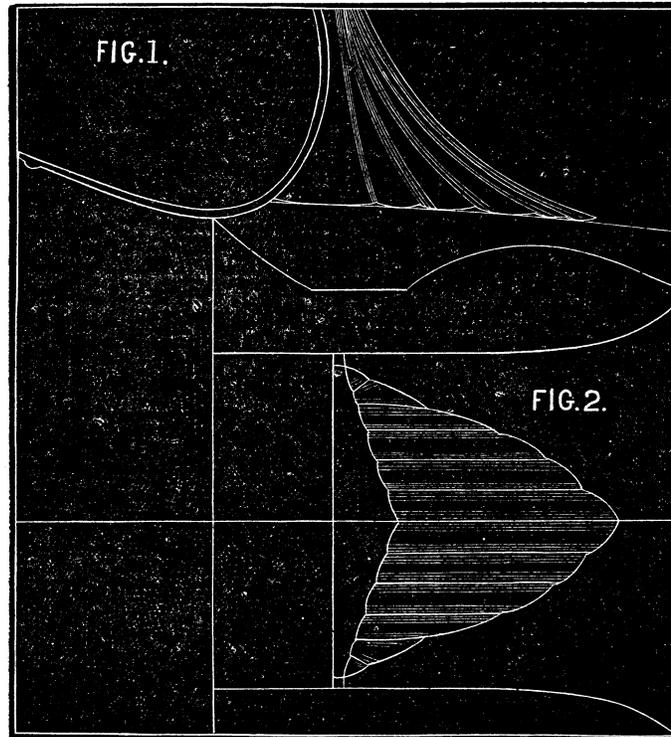
Four-story Factory Building of A. Geissel & Sons.

From *Motor Vehicle Monthly*, July 1927 page 25.

conventions of undertakers throughout the United States, and many orders are traced to these displays.

Several years ago A. Geissel & Sons arranged to act as selling agents for "Henney" hearses and ambulances, a famous line manufactured at Freeport, Ill., the Geissel territory including Eastern Pennsylvania, New Jersey, Southeastern New York State, Long Island, Delaware, Maryland and the District of Columbia. This line is handled by Geissel in connection with the firm's own high grade lines.

The long years of experience of the Geissel company are not confined to the members of the firm exclusively. Among the employees there are many who have served over long periods and because they have encountered and mastered all the technicalities



SIDE ELEVATION AND TOP VIEW OF THE PHILADELPHIA RIBBED BOOT.

3/4-inch Scale.

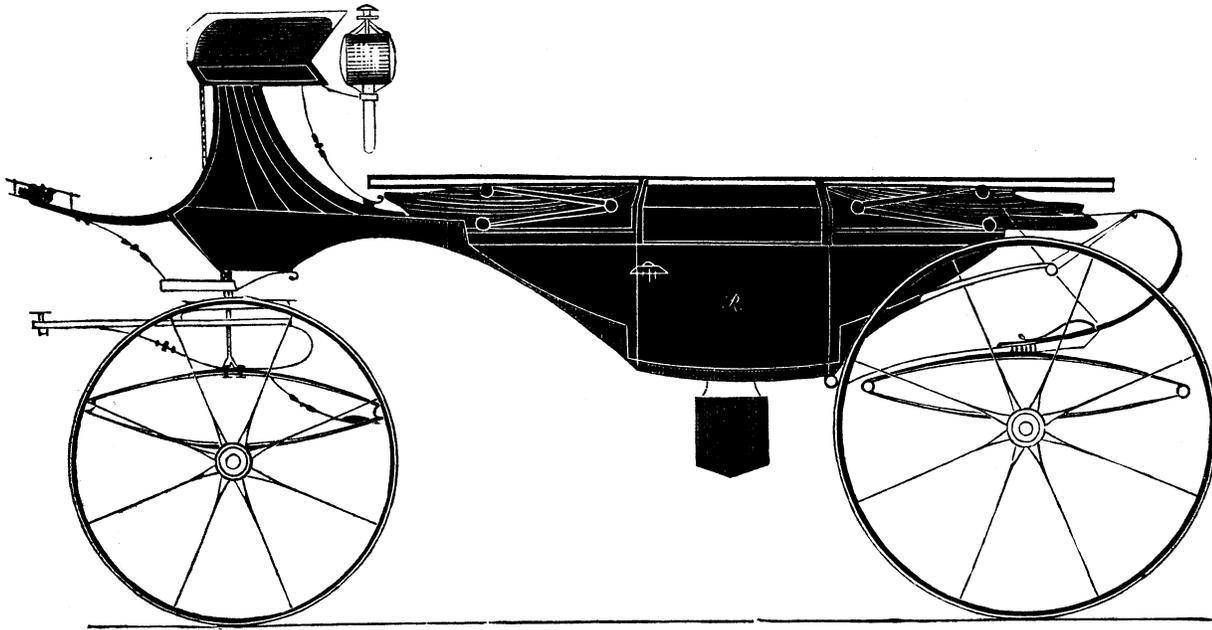
Coach-Makers' Internatioal Journal May 1871
page 114.

The accompanying drawing was furnished by Mr. Hergiest, who is in the employ of Petry, Guisell, Bayha, & Co., 480 St. John st., Philadelphia. It is original with Mr. H., he having designed it for the purpose of removing an appearance of heaviness which attaches to the circular bee-hive boot that has been so popular for some time. We would mention, in passing, that Mr. H. formerly worked in Paris, France, where he had the advantages in acquiring a thorough knowledge of heavy body-making which that city so richly affords. The contrast between the heavy styles in Europe and those of America attracted his attention immediately on his arrival in this country, and as an American workman he has fully caught the spirit of our ideas of lightness. The Landau, for which the boot here given was designed, is probably the lightest one ever built in this country.

Fig. 1 represents the side elevation of boot; it will serve to convey an idea of the appearance of the ribbed portion. The circular boot, while it is certainly

handsome, appears heavy and plain in comparison, and in the construction, the new style removes the necessity of canvasing.

Fig. 2 shows the variety and degree of curvature, and the pieces required in the construction, which are ten in number. Unlike the circular boot, which is constructed by building up with pieces laid horizontally, this has the sections placed in an inclined position, agreeing with the bevel of the boot. They are properly fitted, glued and screwed, so as to form a solid, substantial piece of work, and when the several pieces have been rounded up and finished, there is no canvasing required, thus presenting a foundation for the painting the same as the remainder of the body. The joints, when properly fitted, remain solid; at least those that have been put into service have, so far, proven this to be true. In the June number we will give a fashion plate of the light Landau, with ribbed boot, designed by Mr. H., when we will be prepared to enter into a fuller description of the construction of the boot.



PHILADELPHIA RIBBED BOOT LANDAU.

PLATE NO. 41.— $\frac{1}{2}$ INCH SCALE.—Explanation on Page 129.

Engraved expressly for the Coach-Makers' International Journal.

Plate No. 41. PHILADELPHIA RIBBED BOOT LANDAU.

Coach-Makers' International Journal June 1871.

This plate gives a very faithful representation of the light Landau, which we referred to in the May number. Seen in the ware-room finished, it presents a very handsome appearance, the "ribbed boot," graceful lines of body and extreme lightness, combine to render this an exception in style among this class. We had hoped to be able to give a working draft of this body, but it was impossible to get the drawing and explanation completed.

THE RIBBED BOOT.

A body-maker on first seeing a ribbed boot might be led to think it required more work than the round one; but on consideration the workman will find that the supposition is unfounded. There is, in fact, no more work on the one than on the other; for while the round boot needs to be canvassed and a moulding put on, the ribbed boot requires neither.

Their construction also is quite different. To the top cross piece of the ribbed boot is glued and screwed a piece to fill out the sweep; against this piece the upper ends of the ribbed sections are glued and screwed—the lower ends being attached to the neck panel in the same manner. It is best to take the two centre pieces and glue them together, and then work them out. Each piece should be finished before being glued to the body, as it would otherwise be very difficult to work up. When finished, the pieces are canvassed on the inside.

Dimensions.--Width of body at back: 44 inches. At centre part of door: 53 inches. Front part: 44 inches, measured under the arm rail. The boot near the under carriage-part: 28½ inches. The standing pillar has 3½ inches turn-under. Diameter of hub: 5 1/8. Front band: 3¾; back band: 4 3/8. Spokes: 17-16. Tire: 1¼ by 3/8, steel. Axles: 1 3/8. Wheels: 3 feet 6 inches, and 4 feet.

Painting.—Body: panels, purple lake. Carriage-part: lake, striped with broad lines of black, edged with pink, (carmine and white.)

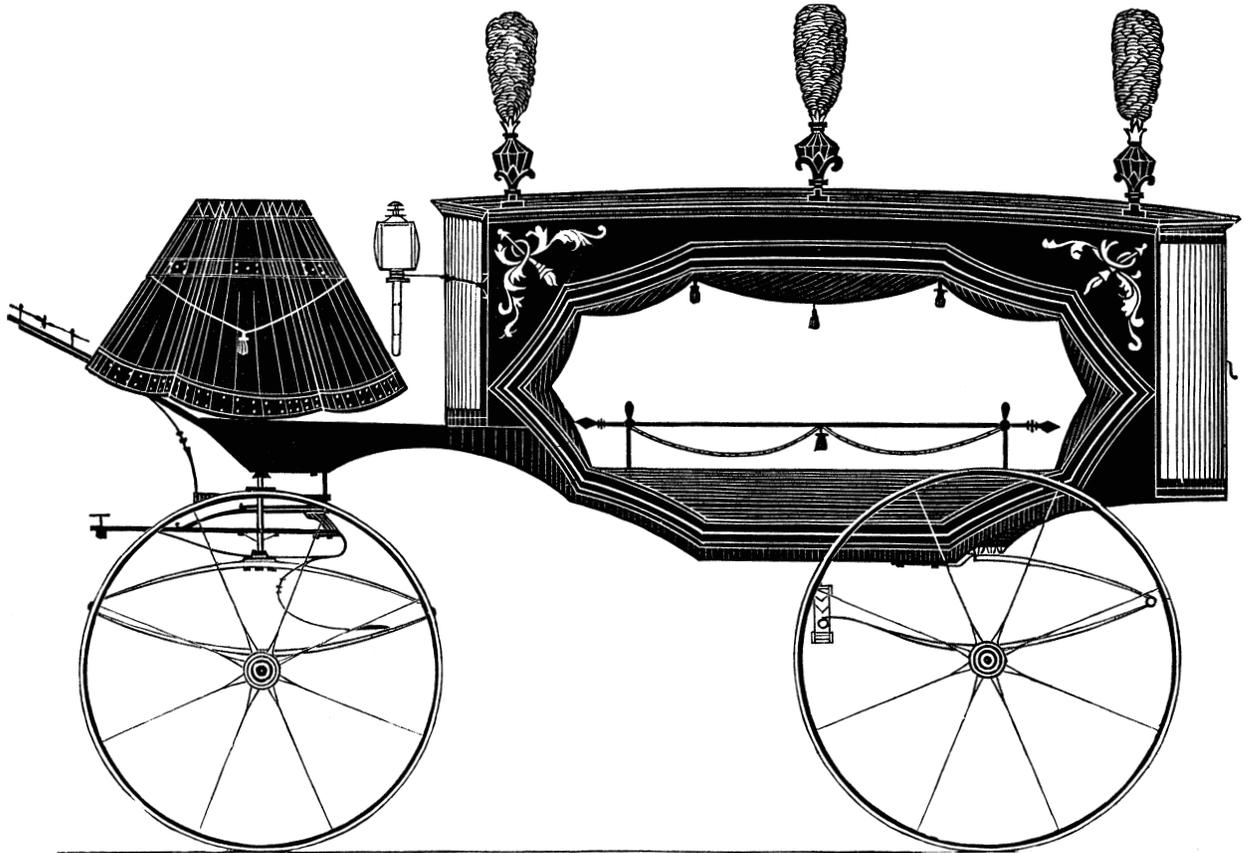


Plate No. 55. SPRING-GROVE HEARSE.

Built by Petry, Geisell & Bayha, 480 St. John, Street, Philadelphia, Pennsylvania.

Coach-Makers' International Journal.
September 1871 page 177 & Oct. 1871.

Plate No. 55.--It has been our custom to give at least one new style of hearse in each, volume, and in doing so we sought to furnish more than a mere imaginary something which would make a great display of exterior finish, and be wholly impracticable when the attempt should be made to construct it. The Circular Hearse, given in April 1870, from which style so many have been built as exact copies, or with slight modifications, represented most truthfully the latest style then being built, even to pattern of urns and plumes, which we copied from the objects direct. The "Spring Grove" presents a modification of the Circular Hearse, and is now being built in this city.

Dimensions.--Width of body: 41 in. Boot: 30 inches. Length of side glass: 76 inches, which should be of heavy French-plate, with beveled edges. Six or eight urns may be used; we rather favor four on a side. They are detachable by means of a brass screw and socket. In its proper

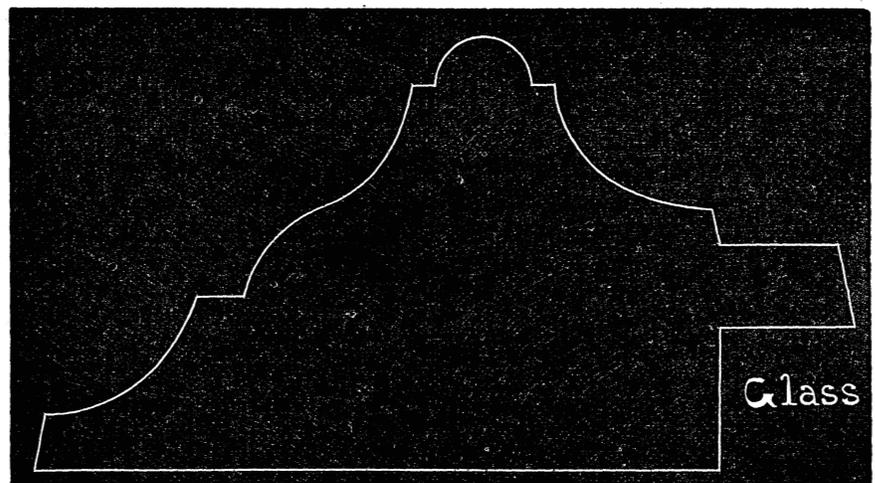
place may be found a cut, showing the style of the heavy side moldings. The working draft given in April 1870, will explain the manner of construction of the body. Width of track for casket should be 18 inches, sunk 2 inches. Hubs: $4\frac{7}{8}$ by $7\frac{1}{2}$ inches. Front band: $3\frac{1}{2}$ inches; back band: $4\frac{1}{8}$ inches. Spokes: $1\frac{5}{16}$ inches. Tire: $1\frac{1}{8}$ by $\frac{1}{4}$ inch. Axles: $1\frac{1}{4}$ inches. Springs: $1\frac{1}{2}$ inches, 5 plates. Wheels: 3 feet 9 inches and 4 feet. Track: 5 feet.

Painting.--Black; the ground work clear Prussian blue, over which lay English black japan.

Trimming.--White cloth.

Plumes.--White and black.

Mounting.--Silver.



FORM OF THE MOLDING ON SIDES OF SPRING-GROVE HEARSE.

IMPROVEMENTS ON THE LANDAULETTE.

Diagram Illustrative of Charles Heergeist's "Improvements on the Landaulette."

Coach-makers' International Journal October
1871 page 2 & 3.

In explanation of the Diagram we would first direct attention to the point marked A. At this point the front pillar is fastened with an ordinary hinge, and invisible on the drawing, as the hinge has to be let in the wood. B is a guide which holds the pillar in a perpendicular position, and fastened inside with a screw to keep it from falling forward. From falling backwards it is hindered through the guide not being long enough to touch it when it is in the perpendicular position. C and D are the joints where it folds together, to lie in the neck. E, F, are joints for falling back, similar to those on ordinary -Landau's. Letters E, F, or the top door piece, will be in the same position as shown by our engraving. The trimming will be on both sides, outside, which will add greatly to the appearance, and is a decided improvement. The leather will be inside. The front part also will lie in a position to display the trimming from both sides. Letters G and g show a box or case made just large enough to receive the glass frames, which are three in number. When it is required to lay the top down, the middle glass frame must first be taken out, after which push the right or left one to the middle and remove it or them. The frames are then deposited in the case G, entering from the front, as shown by the drawing. Here they are out of the way, and in a secure place, all of which has been accomplished in a short space of time. The frames disposed of, we are prepared to unlock the top. Open joint E, and the top will fall forward and backwards very easily. Small Landaulette's and coupes will operate much

better by having but two glass frames, as the bodies being smaller, there would be less space for the frame and case.

It may possibly seem a little odd to some of our readers to think of the glass frames being stowed away under the body in a case made for their reception; but when it is remembered that the glass frames are only twenty-seven inches high, and the whole width of the bottom is forty-four inches, we have seventeen inches, or seven and one-half inches on each side, which is sufficient to hide the frame case, while one stands near the body, and when seen by taking a position farther removed, the appearance is by no means unsightly. The advantages gained far outweigh all the objections that unfamiliarity will first attempt to raise, and we feel confident that the riding public will fully appreciate an improvement which adds so much to their comfort while riding out, subject to sudden changes in the weather.

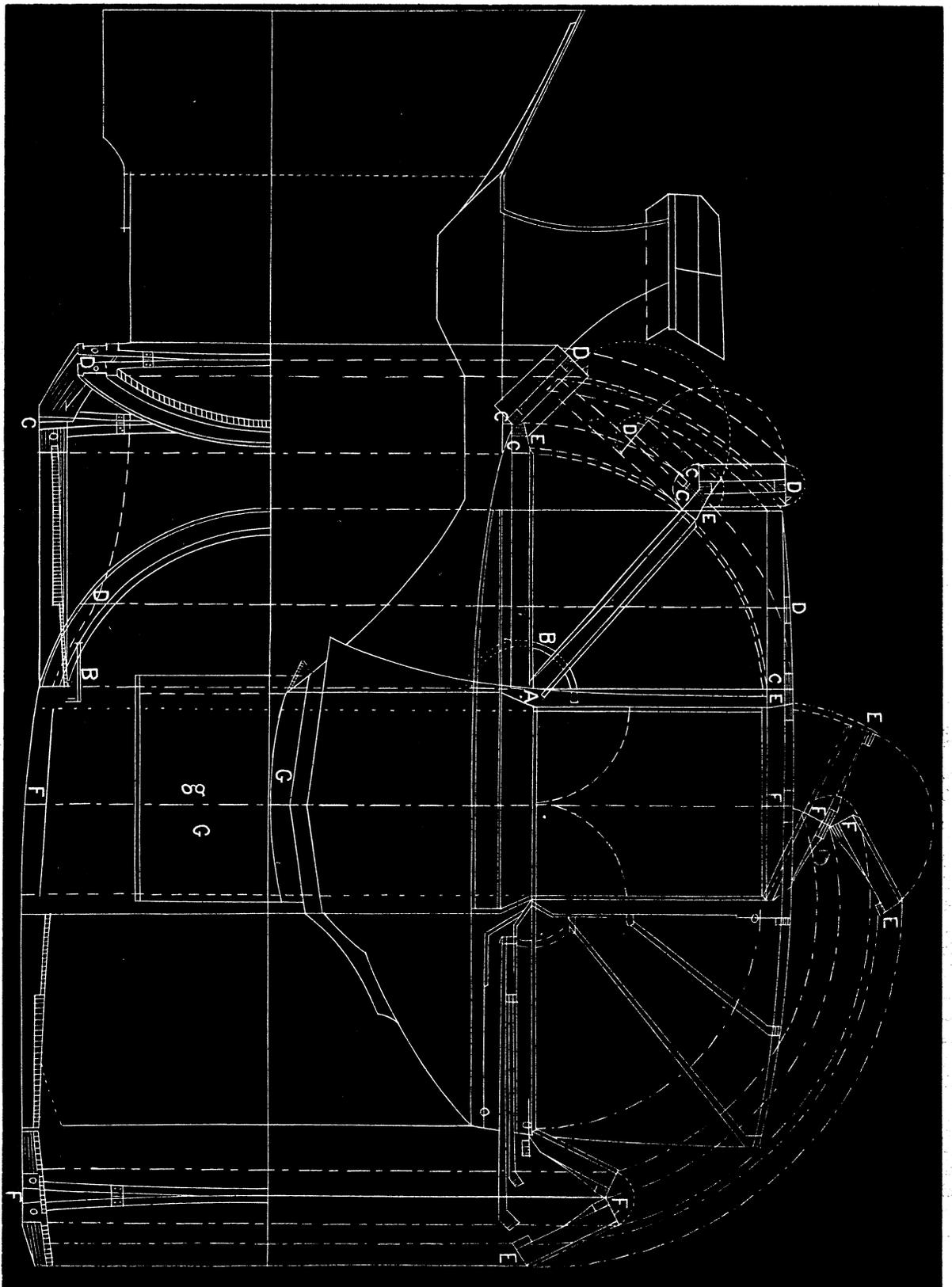


DIAGRAM ILLUSTRATIVE OF CHAS. HERGEIST'S "IMPROVEMENTS ON THE LANDAULETTE."

FOR DESCRIPTION, SEE PAGE 2.

**Plate No. XXXI and XXXII. EIGHT-GLASS
LANDAU.**

Exhibited by Petry, Geisell, Bayha & Co.,
Carriage Monthly July 1876 pages 65.

One, if not the most attractive display in the Carriage Building, is the landau exhibited by Messrs. Petry, Geisell, Bayha & Co., of Philadelphia. It is at the south-west entrance to the building, and has attached four full-sized carved horses, fully harnessed, exhibited by Mr. Phillips, harness manufacturer. Aside from the horses, the carriage is a new pattern, in that the glass quarters are made applicable, and when desired, the glass is removed and the top folded down, as shown in the accompanying drawings on opposite page, in which we show the top closed and opened, displaying the position the top assumes when folded down. The back and head resting on the loop, where it is held firmly by locking the back and head with the same lock that holds them in place when the top is in position. Its improvement is very generally acknowledged of great importance, as the leather quarters are dispensed with, which always assume a dull and wrinkled appearance after being in use a few months or a year. Also, the carriage has a more cheerful appearance with glass quarters. The glass at the back drops into a berth at the back of trimming when folding the top. No joints are used to hold the top in an upright position, it being fastened by locks at front and back, and by catches at the center, holding the whole as firmly together as if made stationary. This firm is making the same style carriage with the back quarter stationary, the front alone folding. The front portion of the top is easily raised or lowered, as it has a coil spring attached by a lever to the hinge, which forms a strong tension when lowering or raising. A child five years old can raise or lower it.

In finish, this carriage is very neat and tasty. The trimming (the work of Mr. Petry, one of the firm) is exceedingly neat, and it is greatly admired by all who have seen it. The mechanical work throughout is a credit to the firm.

Dimensions.—Width of body at bing pillar

50 inches; at lock pillar: 50 inches; back at arm rail: 39 inches; front, at arm rail: 39 inches. Boot: 29 inches. Turn-under: $3\frac{3}{4}$ inches. Moldings: wide and rounded on the edges. Wheels: 3 feet 4 inches, and 4 feet. Hubs: $5\frac{1}{4}$ by $8\frac{1}{2}$ inches. Spokes: $1\frac{5}{8}$ inches. Tire: $1\frac{3}{8}$ by $\frac{3}{8}$ inch. Springs: $\frac{3}{4}$ inches, 5 plates, 42 inches long. Fifth-wheels: 26 inches diameter.

Painting.--Body: panels, dark green. Moldings, quarters, boot and frame-work: black. Carriage-part: black, striped broad line dark green, and distance lines of light green.

Trimming.--Body: green satin, broad lace with dark green ground and light green border, and light green flower with red center; around the quarters and back, heavy cording of green satin is tastefully put on. The head-lining is laid out in neat patterns, forming a twelve pointed star, each division of the top having the same pattern. The cushion and fall are in one piece.

Mountings.-Inside mountings of body, such as card box, pull-too handle and door handle leather covered. Slides and finish of glass slides: rosewood. Spring roller ends: gold.

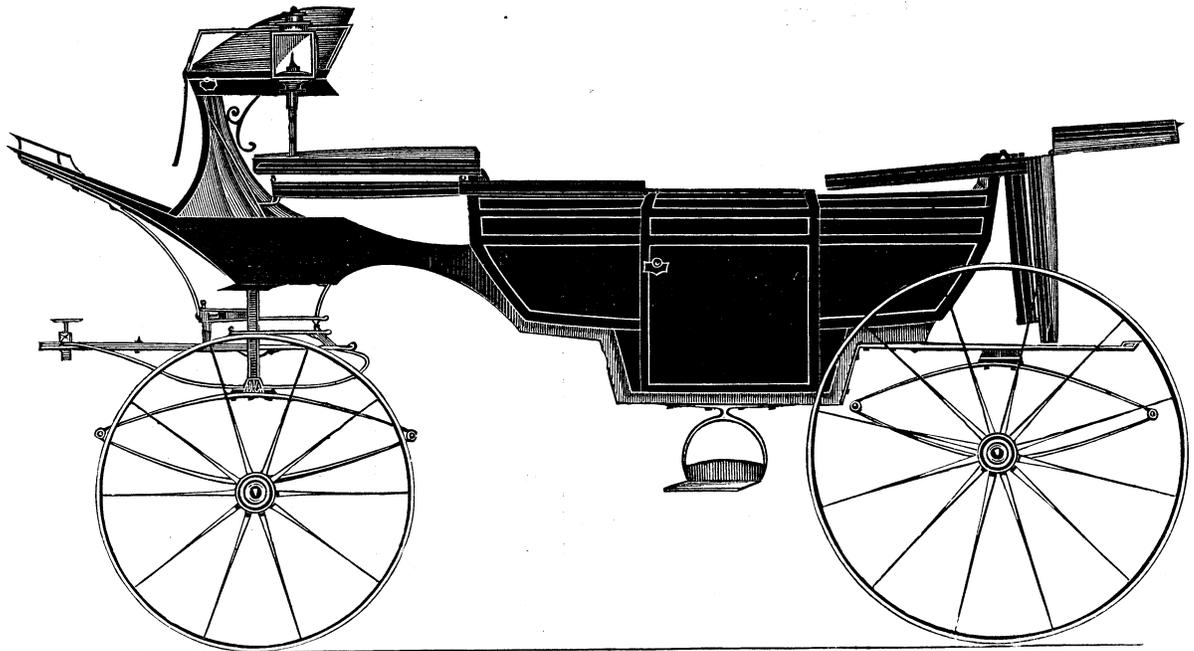


PLATE No. XXXI.—EIGHT-GLASS LANDAU (open), exhibited by Petry, Geissel, Bayha & Co., Phila. Scale, $\frac{1}{2}$ inch.

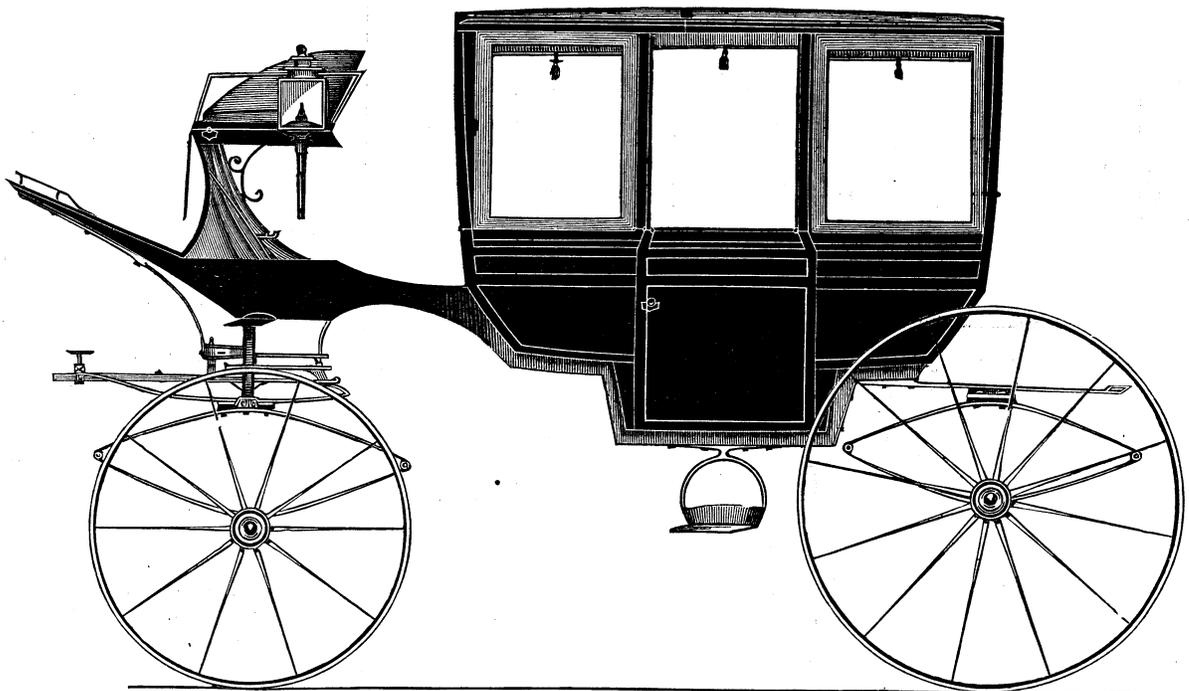
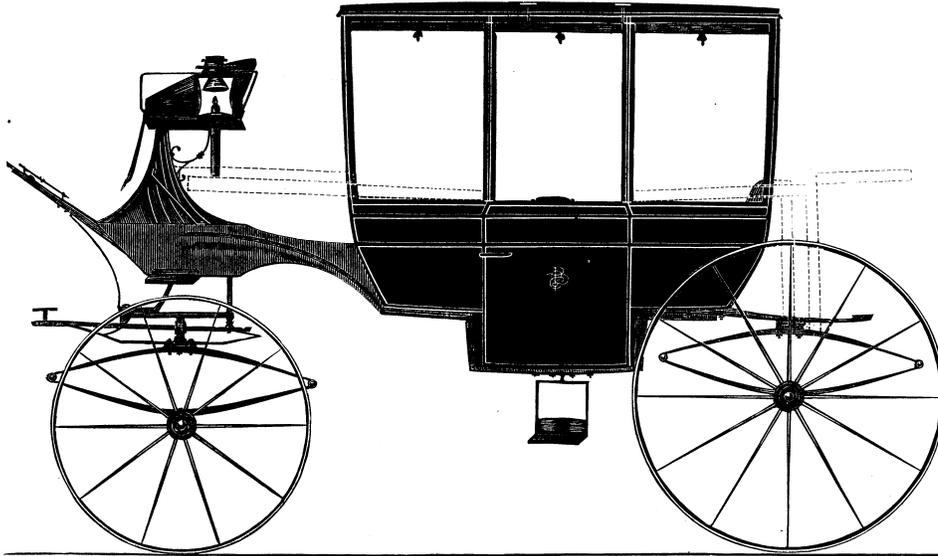


PLATE No. XXXII.—EIGHT-GLASS LANDAU (closed), exhibited by Petry, Geissel, Bayha & Co., Phila. Scale, $\frac{1}{2}$ inch.



No. 51. PETRY'S EIGHT-GLASS LANDAU.—EXHIBITED BY PETRY, GEISSEL, BAYHA & CO., OF PHILADELPHIA.

PETRY'S EIGHT-GLASS LANDAU..

EXHIBITED BY PETRY, GEISSEL, BAYHA & CO.,
OF PHILADELPHIA.

Hub August 1876 page 166.

This carriage, exhibited by Messrs, Petry, Geissel, Bayha & Co., is one of the most notable in the Carriage Building, being a decided novelty in the line of glass landaus, and distinguished alike for its tasteful design and beautiful finish. Its position is an attractive one, being located at the south-westerly corner of the building, with two door-ways opening upon it, and its prominence is still further increased by its being attached to four full-size horses, carved in wood, which are exhibited by Mr. S. R. Phillips, the celebrated harness-maker of Philadelphia. These horses are valued at \$600 each, and the magnificent harness with which they are caparisoned at \$5000. The harness is hand stitched throughout, with the exception of the collars, and elaborately ornamented with gold mountings, inlaid with silver and enamel. The landau has bevel glasses all around, three on each side, and one both front and back, making eight in all. The top falls front and back, without the use of iron stump-joints, and the manner in which the roof and pillars are disposed of is indicated by dotted lines on our cut. The side quarter glasses, which do not drop, are stored away in a box prepared for them in the boot, and all are made of the same size, so that they can be exchanged and put in any of the quarters. The glass in the back drops into a berth just behind the trimming.

The carriage-part, both front and back, is all iron, forged from Norway iron, and finely finished.

The mechanical details of this landau are thus briefly described by Mr. Geissel:

I. Its novelty consists, first, in its having eight glasses instead of five, as ordinarily used for this class of carriage, dispensing with leather in the top, which is liable to wrinkle, and making a more cheerful carriage.

2. Another novelty is this: the top is so made that both front and back top will stay up without joints. It has no joints, but is securely fastened, when upright, by locks at front and back, and by catches.

3. The front top works automatically. An iron bar is placed across the front, on the front arch, and to this bar are attached two spiral springs, which are connected with the top by a lever. The end top-rail is attached to the back frame ; it is first unlocked, and the back lowered; then the top is lowered, and when down, the same lock is employed to fasten the top and back together, and prevent them from rattling. On the top back-pillar, there is also a stop-hinge, to keep the half top-rail over the door in a horizontal position when down.

4. The rear top drops on the pump-handles, and a piece of rubber is placed at the points where it rests, to prevent chafing or rattling.

5. Boot, half Salisbury pattern. The front seat-board is hinged, and at the center of the seat-board is a stay that keeps the top down in place, and prevents rattling when the carriage is in motion.

6. To prevent rain from entering at the line of jointure between the two tops, a groove and flange are introduced, and a molding which the top plate lies up against so snugly that there is absolutely no opportunity for water to enter.

7. The front, back, and door-glasses drop down, and the sidequarter glasses go into a box under the driver's seat.

Principal Dimensions.--The principal dimensions of this carriage are as follow:

Width of body over all, 51 inches. Width of body, back and front, 38 inches. Turn-under, 3½ inches. Width of dickey-seat, 29 inches. Wheels, 3 feet 4 inches and 4 feet 2 inches. Track, 5 feet 2 inches. Hubs, 5¼ x 9 inches. Spokes, French pattern, 1½ inch. Rims, 1 ½ inch. Tires, 1½ x 3/8

inch; the tires are steel and ground down level with the rims. Springs, 5 plates, $1\frac{3}{4}$ inch wide ; length of springs, front, 39 inches ; hind 41 inches ; open, $12\frac{1}{2}$ inches. Axles, $1\frac{1}{2}$ inch. Fifth-wheel, 26 inches diameter. Rocker-plates, $3\frac{1}{2} \times \frac{1}{2}$ inches; ditto in the neck, $2\frac{1}{2} \times \frac{7}{8}$ inches.

Painting.—Body: panels, very dark green, almost invisible; moldings, quarters, boot, and frame-work, black. Carriage-part, deep green, with $\frac{5}{8}$ -inch stripe of black, split with $\frac{3}{16}$ inch line of chrome green, and distanced with two fine lines of latter.

Trimming.--This firm deserve celebrity for the originality and taste of their trimming and this landau exhibits several notable features, which we will endeavor to describe briefly.

1. It has spring cushions, which are made on a frame, and the fall and cushion are made together in one piece.

2. The cord finish on the doors is something quite new, and--few trimmers would guess at once how it was produced. It consists merely of a large cotton cord, covered with green silk, which follows the convolutions of the cord, and presents a novel and very attractive appearance.

3. The finish of the head-lining is exceedingly tasteful. It is divided into two sections, each of which is laid out with a twelve-pointed star pattern.

Mr. Petry thus describes the mode of laying out and making this pattern; "The top is made on a frame, covered with plain muslin, and the draft is made on this muslin, as shown in the pattern which I have given you. First, mark the center of the star; then draw two lines through this center and form a square. Then mark out the points of the star, always working from the center point. A circle, $1\frac{1}{4}$ inch diameter, is next cut out of the center of the satin, to allow for the fullness of the pipes or points to the star. Then take the needle, and draw the satin together at the center, forming the points, and put on small silk cords between them, to keep them down and give the shape ; and then stuff them with a very little hair or cotton, letting the cords show. The length of the pipes, in the centennial job, is 8 inches, and a cord is carried around the circumference of the star, inclosing it with a circle.

The material with which this landau is trimmed is green satin, of medium shade, with broad lace to match, and a heavy cording of satin is carried round the quarters and back. There are no inside mountings of any kind, and card-boxes, etc., are entirely dispensed with. Inside lever lock-handles, leather-covered. Outside door-handles, lamps, and axle-nuts; gold.

Plate No. 30. PONY GIG. (Plate not found).

Carriage Monthly July 1879 page 62.

While passing the carriage factory of Messrs. Geissell & Bayha, of Philadelphia, our eye was attracted by a neat little pony gig, standing by the door of their wareroom, which we, upon inquiry, found to be made for one of their customers. On examination, we found it to be a well-built carriage, and is proportioned fully as well as those of a larger size. Thanks to Messrs. Geisel & Bayha for this design.

Dimensions.—Wheels: Exterior diameter of wheels 39 inches, Exterior diameter of hubs $4\frac{1}{2}$ inches, Length of hubs 7 inches, Mortise of hubs $1\frac{3}{16} \times \frac{7}{16}$ inches, Diameters of bands of hubs $3\frac{1}{4} \times 3\frac{5}{8}$ inches, Width of spokes at square end $1\frac{1}{4}$ inches, Thickness of spokes at square end $\frac{25}{32}$ inches, Number of spokes, 12, Thickness and depth of rims $1\frac{1}{8} \times 1\frac{3}{8}$ inches, Stagger $\frac{1}{2}$ inches, Tire, steel $1\frac{1}{8} \times \frac{1}{4}$ inches.

Front Springs: Length from center to center of bolts 38 inches, Open from out to out $3\frac{5}{8}$ inches, Width of steel $1\frac{5}{8}$ inches, Number of leaves 4, Thickness of first leaf No. 3, Thickness of other leaves No. 3, 3, 4, Weight of springs about 40 lbs., Length of arms of axle for 7 inch hubs, Thickness of axle, at square end $1\frac{1}{8}$ inches.

Body: Across body front 29 inches, Across door pillar front 36 inches, Turn-under 1 inch.

Painting.--Body: black; chamfers on moldings, carmine. Carriage-part: cherry color, striped with two $\frac{3}{16}$ -inch lines black, $\frac{3}{4}$ inch apart.

Trimming.--Light brown morocco tufts, red centers, patent-leather welts. One row of raisers; round fall and cushion fall bound with patent-leather; stitching brown silk. Fall made into cushion. Mountings.--Gold.

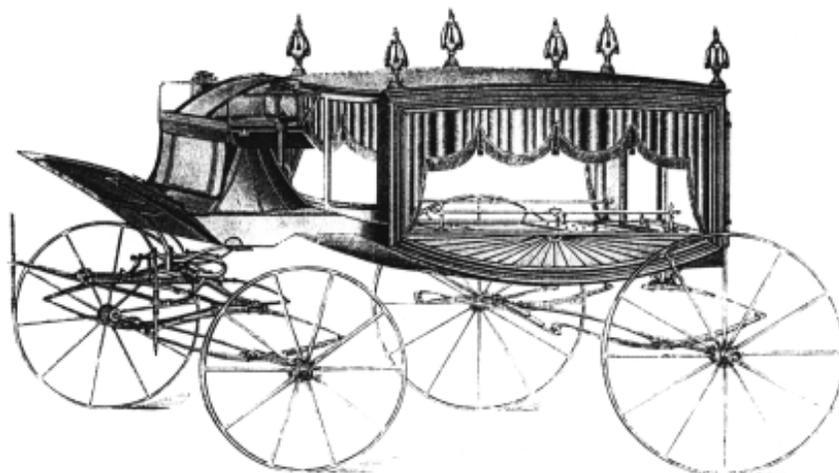


Plate No. 93. HEARSE.

Built by Geissell & Bayha, Philadelphia, Pennsylvania.

Carriage Monthly March 1878 page 224.

Philadelphia has at least one young man who will in time become a good draftsman. We refer to Mr. John Bayha, son of the senior partner of Messrs. Bayha & Geissell. John as he is called in the shop, drew this child's hearse on the block for us, and as all can see, it is very creditably done. He has not finished his apprenticeship yet, and to make such a drawing as our plate, we would say for him to go ahead, that he has found his calling, and bids fair to become one of our best draftsmen. He has our best wishes.

This hearse has polished French-plate glass, 60 x 32 inches: circular, front and back: the front glasses slide over each other to admit air. Boot, concave, and made out of six pieces, leaving a rib on each joint. The six handsome urns are 13 inches high, and fitted with sockets for plumes. The lamps, toe rails, &c., &c., are heavy gold plated. The emblems on each side represent the sun, and the fine white cloth the sun rays. The dickey seat is square, with skirt and fall. Platform gearing, with half fifth-wheel.

Dimensions.--Wheels: Exterior diameter of wheels 41 x 48 inches. Exterior diameter of hubs 3 7/8 inches. Length of hubs 7 inches. Diameter of bands of hubs 3 1/8 inches. Width of spokes at square end 1 5/16 inches. Thickness and depth of rims 1 1/8 x 1 5/16 inches. Tire, steel 1 3/16 x 5/16 inch. Front Springs: Length from center to center of bolts 38 inches. Open from out to out 11 inches. Width of steel 1 3/4 inches. Number of leaves 4. Thickness of first leaf No. 2. Thickness of other leaves 3, 3, 3. Distance of holes apart and size 3 1/2 x 5/16 inches.

Weight of springs about 46 pounds. Length of arms of axle for 7 inch hub. Thickness of axle, at square end 1 1/4 inches. Back Springs: Length of side springs 40 inches. Length of cross springs 36 1/4 inches. Open from out to out of side springs 12 1/2 inches. Open from out to out of cross springs 4 1/2 inches. Width of steel 1 5/8 inches. Number of leaves on side springs 4. Number of leaves on cross springs 4. Thickness of first leaf No. 2. Thickness of other leaves 3, 3, 3. Distance of holes apart and size 3 1/2 x 5/16 inches. Weight of springs about 50 pounds. Length of arms of axle 7 inches. Thickness of axle, at square end 1 1/4 inches. Body: Across boot, front 30 inches. Across door, pillar back 38 inches.

Painting.--Body: white. The color should be a cold-white, to secure which, paint zinc white over a ground of silver-gray. Carriage part: black, striped with broad lines of white. The striping must have two coats, in order to cover solid. The carriage part may be painted white, but the motion of the spring leaves soon causes the paint to break away, and the natural color of the metal shows blackish and very unsightly. The contrast of a black carriage part with the white body, assists in preserving the clearness of the color of the body, and the broad white stripes give the carriage part sufficient of that color to make it harmonize with the body, and preserve the idea of youth and innocence. The urns on body; black, touched up with white, or silver leaf.

Trimming.--Festooning: white cashmere, with white gimp and fringe, mixed with black: seat of white leather, black welts and buttons; drab carpet.

Mountings.--Gold.

Price of draft and patterns, complete, \$12.00.

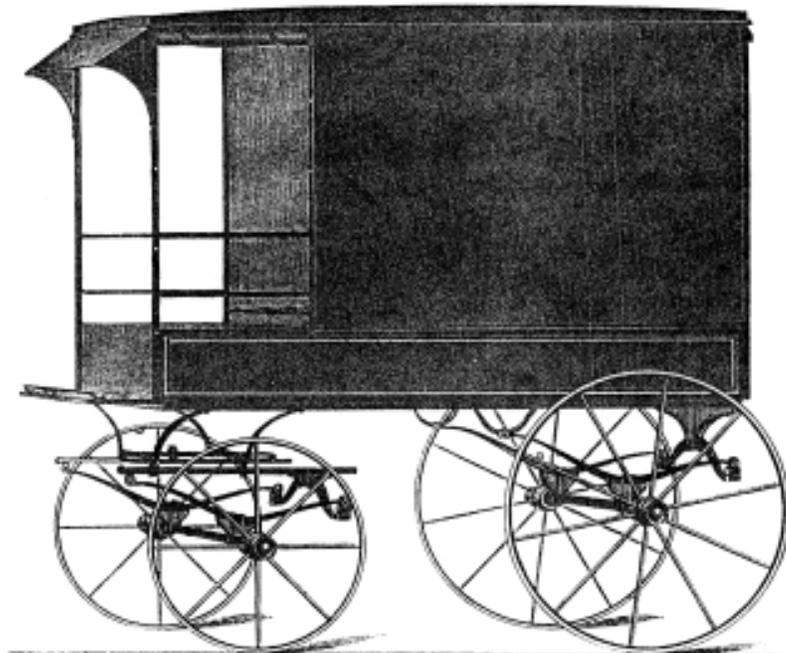


Plate No. 61. UNDERTAKER'S WAGON.

Built by Geissel & Bayha, Philadelphia, Pennsylvania.

Carriage Monthly October 1881 pages 122 & 126-127.

This wagon is lighter than those usually built in Philadelphia. The sides are covered with top leather, lined with drill, the top painting as on coupés and coaches. Also, top leather curtains for front and back, lined with drill, which gives the inside a finished appearance. The carriage-part, which is novel in its application, is illustrated in the Smith Department of this number furnished by Joe Baringer, foreman of the smith department for Messrs. Geissel & Bayha.

Dimensions.--Wheels: Exterior diameter of wheels 36 and 47½ inches. Exterior diameter of hubs 5 3/8 inches. Length of hubs 7½ inches. Diameter of bands of hubs 3¾ x 4½ inches. Width of spokes at square end 1½ inches. Number of spokes front and back 12 and 14. Thickness and depth of rims 1¼ x 1 3/8 inches. Stagger ½ inch. Tire steel 1¼ x 3/8 inch. Front Springs: Length of center to center of bolts 37½ inches. Open from out to out 6 inches. Width of steel 1½ inches. Number of leaves 5. Thickness of first leaf 2. Thickness of other leaves 3, 3, 3, 3. Length of arms of axle for 7½ inch hubs. Thickness of axle, at square end 1¼ inch full patented. Back Springs: Length of side springs 38½ inches. Length of cross springs 42 inches. Open from out to out of

side springs 6½ inches. Open from out to out of cross springs 7 inches. Width of steel 1½ inches. Number of leaves on side springs 5. Number of leaves on cross springs 6. Thickness of first leaf No. 2. Thickness of other leaves Nos. 2, 3, 3, 3.

Painting.--Body: black. Carriage-part: black, striped with a dark blue line, ¼ inch wide.

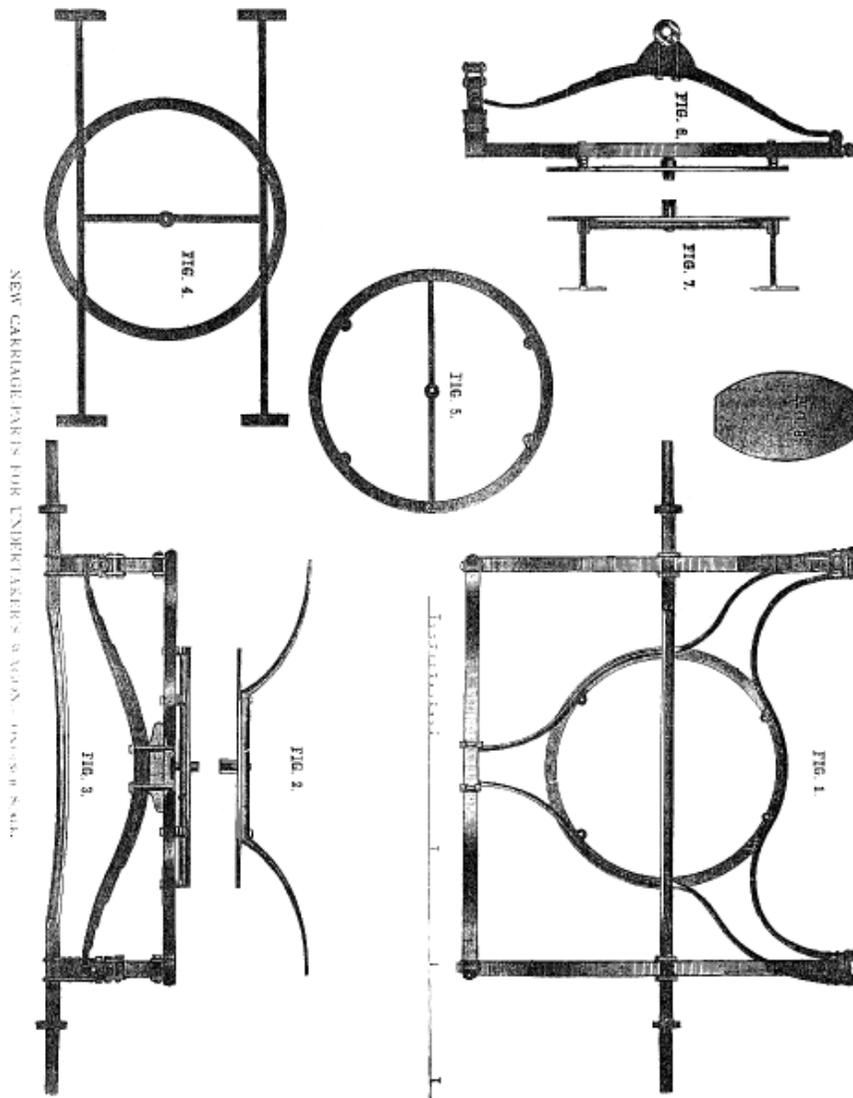
Trimming.--Top leather curtains and sides, lined with drill. Cushion also leather.

Mountings.--Silver.

NEW CARRIAGE-PARTS FOR UNDERTAKER'S WAGON. (For Plate No. 61)

Fig. 1 gives us the bottom view of carriage-part. By illustrating this, we are enabled to show the curves of the irons and their fastenings. This piece of work is very simple, containing only the three curves and the full fifth-wheel. The side ones are welded together under the back cross-spring, and in front the three pieces are bolted together with two bolts on each side. The full fifth wheel is bolted with six bolts to the curve, both fifth-wheel having flanges to add to the strength of the job. The fastenings for front spring-heads are forged solid to the curves, thus making it, with all its simplicity, a very difficult job.

Fig. 2 illustrates the back top bed, which is bolted to the upper fifth-wheel. Two of these beds are necessary, but while Fig. 2 is 14 inches from the centers of bolts or fastenings of fifth-wheel, the front bed is only 10 inches from centers of bolts. These two beds are in reality but one, as they are welded



together, which we show more clearly in Figs 4 and 7.

Fig. 3 illustrates the back view. The bottom fifth-wheel has a cross-bar, which we could not show in Fig. 1, the axle covering it. The depth of the cross-piece containing the socket, is $1\frac{1}{4}$ inches, marked below the bottom fifth-wheel. The axles, as shown in Fig. 3, are curved.

Fig. 4 illustrates the top view of top bed. The fifth wheel has flanges exactly like the bottom fifth-wheel, the stays bolted to it. The stays are welded solid in one piece by the cross bar, which also contains the king-bolt socket.

Fig. 5 shows the top view of bottom fifth-wheel, having the cross-bar, which contains the king-bolt socket, opposite of upper fifth-wheel.

Fig. 6 illustrates the side view. In this view the flanges, which are welded solid to the curves for

front spring-heads, can be seen to greater advantage.

Fig. 7 is the side view of top bed. By comparing Figs. 2, 4 and 7 together, it will be clearly understood. Fig. 8 illustrates the shape, full size, of all the stays and curves of the entire carriage-part, $1\frac{1}{4}$ x $\frac{5}{8}$ inch, Norway iron.

The front platform springs are $37\frac{1}{2}$ inches long from center of bolts, 6 inches opening from center of bolts to outside of spring; width of steel $1\frac{1}{2}$ inches, 5 plates, first plate No. 2 steel, the others No. 3 steel. Cross spring, 42 inches long from centers of bolts, 6 plates, Nos. 2 and 3 steel.

Back platform springs, $38\frac{1}{2}$ inches long from center of bolts, $6\frac{1}{2}$ inches open; width of steel $1\frac{1}{2}$ inches, plates 5, Nos. 2 and 3 steel. The cross-spring is the same as the front, except having 7 inches opening. Axles, $1\frac{1}{4}$ inches, full patent.