

## GRAY'S FERRY CHEMICAL WORKS.

These works are located in the south-western part and within the city proper limits of Philadelphia, and occupy an area of twelve and a half acres, extending from Thirty-fourth to Thirtyfifth Streets, with a frontage of nearly six hundred feet on Gray's Ferry Road, and running back to the river Schuylkill. Here, unlike the old Kensington works, the eye falls upon nothing that savors of the past, and the buildings, machinery, apparatus and every appurtenance whatsoever, are invariably the very best that ingenuity or the suggestions of experience could require.

Upon entering the enclosure, the first structure we see is a Stone building, finished in mastic, about sixty feet front by, one hundred and twenty-five feet in depth, and three stories high. Here are the Offices, the Analytical Laboratory, and the ample halls for putting up, packing and storing Azurene, an article concerning which we shall presently speak at some length, in its proper connection, and we shall again advert to this building farther on in our sketch. Passing through the office and entering the yard, we

# VARNISH BUILDING

standing quite isolated and for purposes of security from fire, at a judicious remove from other structures. Here are the usual appliances of boilers, etc., for the manufacture of Varnishes which are the invariable appurtenances in such establishments. There seems to be nothing particularly noteworthy here. An iron pot, set in masonry, and smeared with gums and oils, is not a specially interesting or exhibarating spectacle, and may be multiplied indefinitely without producing a very profound effect upon the spectator. Bestowing a hasty and not very approciative glance upon the grimy utensils, which are here congregated, we pass to a high brick building, about forty by two hundred and fifty, in which are the

## SULPHURIC ACID WORKS.

Here are three brimstome furnaces, (which are charged every twenty minutes,) the usual steam boilers, etc., and five leaden chambers. (It has been found necessary to put up a sixth chamber, outside, at the lower end of the building, to meet the increasing demand.) The largest of these is twenty-five feet wide by twenty feet high and one hundred feet in length, and in its construction about fifty tons of sheet lead were employed. A depth of one inch of Acid in this chamber is equivalent to three hundred carboys. These chambers are supported by wooden frame work, to which they are attached by leaden fastenings. No solder is used-the edges of the sheets having been fused together by the oxy-hy-

The production of Oil Vitriol is the result of a series of complex reactions which need not be detailed here. Ingenious contrivances have been introduced for ascertaining, at any moment, the strength of the chamber acid, and for drawing off the acid for concentration and other purposes. The foundations of this building are immensely strong, as also are the two rows of massive columns in the vault which extends the whole distance beneath these chambers. This vault seems to be used for storage; for leaden tanks containing acid drawn-from the chambers, ready to be filled into carboys; for carboys filled or to be filled, arranged in tiers to the number of four to five thousand. Leaving this department and passing through a large room, some eighty feet square, where are retorts for the manufacture of Nitrate of Iron, stills for Muriate of Tin and other "apparatus including that for Nitrate of Lead, we ascend a platform where an attendant stands watching through a window the processes going on in the x -

# CONCENTRATING HOUSE.

Here is revealed a long line of glass retorts containing Oil Vitriol in a state of ebullition. When seen to boil too feebly or too furiously, the man at the window darts into the room, checks or promotes the draft, or throws on fresh coal, as the case may require, and immediately escaping returns to his post of observation. No one is permitted to remain longer than is absolutely necessary where the process of concentration is going on, as serious consequences might ensue were any of the retorts to burst. It is here that the pan or brown acid (60°) is converted into standard 66° acid, or Oil Vitriol. This mode of concentrating in glass is found in comparison with the process in platinum to produce acid free from impurities; and though troublesome, the superior excellence of the acid, the saving of capital and interest amply compensate for that. Emerging from this building we find ourselves in an area where may be seen heaps of brimstone and yards for the storage of coal, which latter article the location of these works enables the proprietors to purchase at low prices by the cargo, coming as

it does by water from the interior mines.

# THE MURIATIC ACID WORKS

come next in order, occupying a building one hundred feet square. The preparation of this Acid is effected by the action of Sulphuric Acid upon Salt in long cast-iron cylinders, about two and one-half feet in diameter, set longitudinally in masonry over fire chambers. The product is discharged from these cylinders and gathered in the usual manner. The Salt (Muriate of Soda,) with which the cylinders are charged is changed to Sulphate of Soda, or "Salt Cake." which is sold to manufacturers of fertilizers and others. Here, also is the apparatus for the manufacture of Aqua Fortis and of Nitrio Acid, which is purified Aqua Fortis. And here are immense Salt bins of a capacity of twelve thousand bushels. In connection with the Muriatic Acid, and other apparatus, we find the crystalizing tubs, etc., for the manufacture of

### GLAUBER SALTS.

or, refined Sulphate of Soda, which is an incidental product from the residuum (Salt Cake) of the Muriatic Acid works. At a short remove is a building sixty feet by one hundred, where are the stills for the manufacture of

## ACETIC ACID.

an article largely used by Color Manufacturers, Calico Printers. Corroders of White Lead, Picklers, (who make an excellent Vinegar by diluting it with one part to twenty of water,) and others. It is distilled from Acetate of Lime and Soda by an improved method, the right to use which has been recently sold for certain specified States for the sum of \$5,000. The product by this process is found to be much purer and more reliable than the ordinary distillations. We next visit the

### WHITE SUGAR OF LEAD WORKS,

the productive capacity of which may be worked up to twelve thousand to fifteen thousand pounds per week. Litharge is dissolved in Acetic Acid, (from the distillation of Acetate of Soda,) till the Acid is saturated. This solution, after being concentrated by boiling in large copper pans, and passing through certain intermediate stages, is finally poured into suitable small earthen-ware pots for crystalizing, a process occupying about two weeks, and from the peculiarity of the pots, affording large "plate glass" crystals. Between this department and the Schuylkill are the

# STABLES, PUMPING ENGINES AND WHARF.

The stable building is admirably arranged, and is one hundred feet long by fifty feet deep. The boiler house and pumps are of canacity to furnish the entire establishment with a profuse supply of what Philadelphians consider the purest water in the worldthat of the river Schuylkill. The water is filtered through charcoal before discharging into three reservoirs of a capacity of fifteen thousand gallons each, which are erected in a central position with reference to the various departments where it is required. The wharf extends some one hundred and eighty feet, with a frontage of nincty feet, and having a depth of water ample for the largest vessels that ever ascend the Schuylkill, easily accommodating those drawing eighteen feet at low water. In the rear of the Con-Works, we find

# THE LITHARGE WORKS,

where is produced the Glassmaker's Litharge of this firm, which enjoys a higher repute among the Flint Glass Manufacturers of this untry-than Oxides-of Lead from any other sources whatsoevermestic or foreign. This Litharge is prepared under the Atwood patent, which has been purchased by Harrison, Brothers & Co., with the exclusive right to manufacture in six principal States. The apparatus consists of revolving from furnaces or retorts, which turn on friction rollers and are driven by an upright steam engine of ten-horse power. These revolving cylinders are charged with Pig Lead, the purity of which has been previously tested by analysis, and in eight to sixteen hours the charge is converted into Protoxide of Lead, of Litharge, of a bright yellow color. It will be perceived that this process effects an important saving of time, and a further advantage amounting to an almost entire saving of labor. The substitution, too, of the incessant agitation of the blue Lead in these rotary furnaces, for the intermittent agitation by means of long rakes in the old style of reverberatory furnaces, produces a more perfect and uniform degree of oxidation. The product is also free from such impurities as are hable to be deposited in the Massicot during the usual process where the oxidation is effected by flames playing over it. Leaving these Litharge Works,

# IMMENSE MILL HOUSE

and its contiguous buildings for the preparation of Colors; also, the Drying Rooms and the Boiler House. This magnificent mill building is a massive brown-stone structure, with handsomely pointed masonry, reminding one of a Walnut Street residence

affording easy means for transporting goods from one story to another. Here, and in the stories below, and at the stairway landings are water buckets, pipes and hose ready for instant use in case of fire. On the second floor is the can shop. Here are stacks of kegs, filled or to be filled with paints in oil. Stacks of caus, not less than eighty thousand in number for colors in oil, of all sizes. from one quarter pound blue cans to one hundred pound putty cans; lofts laden with tin cans for dry colors, and with the patent metallic round and oval cans, used by this firm, highly glossed, of a color indicating the pigment to be packed in them; green and vellow for chromes and red for vermilion and imperial scarlet. Here is a long row, extending half the length of the building, of burr-stone mills, and a like range of iron mills, for the grinding of colors in oil. No color is permitted to pass the inspector's hands till it has been ground impalpably fine, and one object in this ample equipment in the way of mills was that this end might be accomplished at all times, however great might be the demands of the trade for goods." In this room are large copper drying pans which are provided with hollow-bottoms. Exhaust steam is utilized for heating these pans. Here Umbers and Siennas are dried, and the mixtures for white paints. (The furnaces or retorts for burning umber and sienna are outside in the "earth and graining-paint de partment.") " Running parallel with the drying pans are the mixers, twenty in number, so arranged as to discharge their pasty batches into the White Lead Mills on the floor beneath. Here also are long rows of tubs for goods, and busy operatives engaged in filling, sealing and labeling cans, which when ready are deposited in deep shelved closets. The Putty Mills, constructed upon the English plan, are located on this floor, as well as the apparatus for preparing and grinding patent dryer. Descending to the first floor we enter the sample room where operatives are employed filling compressible tubes with colors, etc., in oil, for the use of the sales men of the firm, and to be sent to parties who apply for samples for examination. In this room is the machinery for cutting labels. We next enter the main room, where are the bins for yellow and carlet; White Lead mills arranged in double tiers, as already described at Kensington, the upper tier receiving its grist from the mixers upon the floor above, and discharging into the hoppers of the tier of mills below, and these in turn discharging into tubs from whence it is removed as required and packed in cans, kegs and barrels for the market. Here is a patent machine for heading the metal packages of White Lead, etc., like that at the Kensington works, doing its business with precision and great rapidity. In this section are galvanized iron tanks for storing linseed oil, and large quantities of merchandise of various kinds are piled in order ly tiers at the southern end. In an apartment opening westward

# MAGNIFICENT STEAM ENGINE

of one nundred and seventy-five horse power, which with four o lesser size elsewhere in these works, furnish ample driving force for the simultaneous running of every kind of machinery with which this gigantic establishment is equipped. This principal engine is constructed with a combination of elegance and massive strength most creditable to the builders, Pusey, Jones & Co., of Wilmington, Del. It has a patent cut-off by means of which it is capable of being run down to five horse-power, thus effecting great economy of fuel when it is not necessary to run the engine to its full power. Within convenient access to the engine room, so as to centrating Department and east of the Muriatic and Nitric Acid be readily under the supervision of the engineer, are the black smith shop, and the machine shop with its forges, lathes, etc. Near here are the furnaces and other apparatus for the production of Bichromate Potash in liquor used in the manufacture of yellows, and other purposes, thus saving the expense of crystallization. We next visited

## THE COLOR WORKS,

where, on a very large scale may be seen the usual tubs and tanks for solutions and the ample filters, where the pulp is drained previous to its transmission to hydraulic presses for a more complete expression of its moisture, preliminary to its transfer to the drying com, where twenty tons of colors may often be seen drying at one time. Here is the Vermilion department with its tanks, tubs and copper boilers, and other apparatus. The manufacture of this article is a very delicate operation. Batches are easily spoiled. Of the color makers who have undertaken its preparation there are few that have found any profit in the article, and most after work ing in it with varying success have wholly abandoned the manufacture. The fact that this firm has not had from the start one single unsatisfactory batch, shows the perfection of their methods of working, and the care exercised in the manipulation. These works can easily turn out, ready for the market, of Greens three to five tons per day; of Yellows two to three tons; of Vermilions one and a half to two tons; and of Blues, twelve hundred to fifteen hundred pounds. Prominent among its products and possessing a high degree of excellence, of which the proprietors may be justly proud, their

### LISLE PERMANENT GREEN, OR PARIS GREEN SUBSTITUTE

deserves special notice. It is a perfect substitute for Paris Green rather than of a factory. It is eighty feet deep, one hundred and It is much cheaper than that favorite color, and has besides four or eighty feet long and three stories high. At either end are spacious | five times its covering properties. Its use is not prejudicial to the stairways. On the third floor are can and box lofts; coopers' and health of the consumer, as is that brilliant but pernicious product carpenters' departments; mills for powdering Blues and Greens; of arsonious and other poisons. It has been subjected to the mills for grinding rough products, barytes, etc.; bins for the storage | severest tests, and is guaranteed perfectly permanent in hue under of dry Blues and Greens; and at either end are steam elevators, any changes of weather or temperature. A heap of the dry article

has been placed on a roof in midwinter, and subjected to the severest cold and to the poltings of show and sleet, and has been suffered to remain till midsummer, exposed to sunshine and shower, till it has nearly washed away; and after this experimentum cruois the few remaining particles have been found unchanged in color. It has been boiled in fresh water and in salt water, as well as in linseed oil; it has been applied to blinds and treated to a seavoyage round the horn to San Francisco, and its beautiful shade, under these varied and severe tests, has been always inflexibly permanent, and Harrison Brothers & Co. are reaping a rich reward for their efforts in perfecting this inimitable Lisle Green. Ninety tons of it, reported on hand at stock taking on the 1st of January last, have been absorbed by orders already, and the apparatus for its preparation is constantly tasked to its full capacity.

Another product of Harrison Brothers & Co., which is as yet merely in its infancy, but which shows evidences of being rewarded with an early and splendid success, deserves special mention. We refer to their already celebrated

## AZURENE.

OR INDIGO SUBSTITUTE FOR LAUNDRY PURPOSES.

In the Azurene Building, where this article is made and dried preparatory to being ushered into the packing-rooms, are four large tubs, three of capacity of 10,000 gallons, and one of half that size, in which the necessary mixtures and washings are made, running off into filters, and thence to the hydraulic presses and dryingroom. In this latter apartment the pulp is placed on slabs of porous stone over steam pipes and allowed to dry slowly. Let us now return, after all these peregrinations, to the point whence we set out. Here in the building where are the offices of the firm, the shipping clerk and the telegrapher, and the laboratory of the analytical chemist, are the three halls devoted to the labeling and packing of Azurene, three store-rooms and one large room, where the printing matter, the glass and canvas signs and the samples are stored. These samples are kept in two bins-one for English, and the other for German. The rapid growth of this Azurene interest may be inferred from the fact that so recently as last August, but two persons were required to label and pack for the market, and that now the three halls that have been mentioned are devoted to this purpose, each equipped with long rows of tables, arranged with scales, etc., and with a separate force of girls and a forewoman to each hall. And already, of English samples, one million have been put up, and of German, one hundred thousand. Elsewhere will be found an advertisement of Azurene, and some editorial remarks regarding the same. We had not time to inspect the works where is prepared the

### FARMERS' AND PLANTERS' SUPER PHOSPHATE OF LIME,

a fertilizer that has met with marked success wherever introduced, not excepting in the arid but highly productive State of New Jersey, whose thrifty citizens are notable for the microscopic scrutiny wherewith every commodity which they consent to receive in exchange for money is explored and tested.

Purposing to make this fertilizer the subject of a separate com munication, at a future day, we content ourselves with printing with this issue a circular prepared for distribution this spring, and beg to call the attention of all interested in the subject to the same.

## CONCLUDING REMARKS.

Assuredly it is no exaggeration to state that the facilities at the command-of-Harrison Brothers & Co. for the manufacture of the various articles produced at their extensive Works at Gray's Ferry and at Kensington are unsurpassed, and in some respects, as in the production of Colors, the advantages which they possess over other Color manufacturers are obvious. On their own grounds are produced the chemicals or bases required in the making of -Colors, and for this purpose these ingredients are here used before they have been burdened with the various expenses in the shape of crystallizing, packing, porterage, freight and manufacturer's profit, all of which charges must be defrayed by other Color manufacturers, who have not such advantages, and must therefore buy their bases from the manufacturing chemist or the importer. Certainly, too, no Color Works and no Mill House in this or any country, in the same department of industry, is so amply and splendidly equipped with machinery and apparatus. It was manifestly the intention of Harrison Brothers & Co., in planning and constructing these Gray's Ferry Works, to be provided for any reency and any demand upon them for goods. If the scheme was magnificent, the profusion of expenditure in procuring whatever might contribute to the realization of that scheme was no less magnificent. Since the establishment, however, of their New York office, and the branch at Chicago,

# Nos. 192 Lake and 20 Wells Streets. (ROCKWOOD & BLOCKI,)

there seems to be a prospect of these two establishments being worked up to some approximation of their capacity.

1846.

# FARMERS' & PLANTERS' Super-Phosphate

DO NOT STINT!

BE LIBERAL AND THE YIELD WILL REPAY YOU.

Let the Super-Phosphate be Drilled or Harrowed In.

FOR COTTON-Use from 300 to 400 pounds FOR COTTON—Use from 300 to 400 pounds in the row when planting.

FOR TOBACCO.—This plant is a strong feeder, and requires, perhaps, more than any other, a liberal application of aminonia and of mineral food, such as Phosphates, &c. Use from 350 to 450 pounds, sown broadcast, or applied in the hill, or both. This will almost certainly double the yield, and greatly improve the weight and quality of the plant.

—FOR CORN.—Sown broadcast at the rate of from 300 to 450 pounds per pere in a handful from 300, to 450 pounds per acre, in a handfu

to two hills.

FOR OATS.—250 pounds, hargowed in with

the seed. FOR WHEAT OR RYE.—300 to 450 pounds

FOR POTATOES.—Strew along the row when planting, about 350 pounds to the acre. FOR TURNIPS.—300 to 400 pounds to the acre, at the time of seeding.

FOR TOP DRESSING,—Either grass or grain, from 250 to 400 pounds will pay largely

The limited space here forbids any extended notice of certificates. The few copied below have been received since our last issue, and are among the many that may interest the farmer. Our next Circular for the fall, or following spring, will present the opinions of our friends throughout the South, where the "FARMERS" AND PLANTERS' has been carefully tested upon cotton, tobacco and other crops, and cannot fail to be satisfactory to those who place reliance upon the reports of their neighbors.

## From J. T. Christy, Upper Oxford.

Messrs. Hurrison Brothers & Co., GETNLEMEN:-I used this senson upon my corn your Farmers' and Planters' Super-Phosphate of Line, with, to me, very satisfactory results. I had no reason to expect much of a crop, from the fact that the ground planted had crop, from the fact that the ground planted had not been farmed for the past seven or eight years, and the year before hardly yielded grass. No lime, manure, or any kind of fertilizer, as a have been informed, had been used on it during that time. Last year I planted the field adjoining, which was similar in character, with corn and used a popular fertilizer, applied in the fill and had not corn enough to pay for the cultivation of the crop. This season I used on the ground first spoken of your Super-Phosphate, 300 lbs, to the acre, and had fully-fifty bushels to the same of well matured conf. The crop was not equalled by many more highly inproved farms in the neighboghood, and excelled. proved farms in the neighborhood, and excelled by none. I do not know to what else to attribute the success but to the use of your Phosphate of Lime. of Lime.
Very respectfully,
J. T. CHRISTY.

# P. S. The sample of ears which I send you is a fair exhibit of the crop.

From John Doyle, Bensalem Township. DEAR SIR: -I have used the Farmers' and Planters' Super-Phosphate upon corn, wheat. rianters' super-prospinate upon corn, wheat and other crops, and it gives me pleasure to state that I consider it invaluable to the farmer I very much prefer it to \_\_\_\_\_'s, which I had previously used. I will consider it a pleasure to speak well of it to my neighbors, and Turust my recommendation may do them, as well as you, a service. Very respectfully, JOHN DOYLE.

From Fennimore & Wilson, Leipsic. Messrs, Harrison Brothers & Co., GENTLEMEN:—We wish you to send us another load of your Farmers' and Planters' Super Phosphate. The Captain of vessel will report 

Yours, respectfully, FENNIMORE & WILSON,

Parties wishing our Pamphlet of Certificates please address HARRISON BROTHERS & CO., Philadelphia or New York, or HARRISONS & WHELEN, Baltimore, Md.

# IN LUMPS.

To be used in a Bag the same as Indigo.

IN POWDER.

Put Up in Patent Sifting Box, and

# IN LIQUID.

See Following Certificates:

### FROM BOOTH & GARRETT, Auglytical Chemists, Philadelphia.

PHILADELPHIA, Nov. 20th, 1868,

Messrs. Harrison Brothers & Co.,

105 South Front St., Philadelphia.

DEAR SIRS:—We have made a careful examination of the "Azurene" manufactured by you, and while the color itself seems to be all that can be desired for beauty, we find it entirely free from Oxalic Acid and neutral in its character, giving it additional claims for the Laundry purposes for which it is manufactured.

We should not hesitate to use it ourselves in domestic economy.

# Respectfully yours, BOOTH & GARRETT. (Signed)

# FROM S. DANA HAYES, Assayer for the State of Massachusetts.

Assayer for the State of Massachusetts.

Boston, 19th Nov., 1869.

Messrs. Harrison-Brothers & Co.,
Genyllemen:—Your "Azurene" has been analyzed and compared with other articles used as Laundry Blueing.

We have found it entirely soluble in cold water, and much more rich in coloring matter than other preparations. It is free from any polsonous or corrosive substance, or any matter, which can impair the finest textile fabrics. Among the large number of preparations both solid and pasty submitted to us, no one has presented a composition so pure or possessed so fine an azure blue color, and we regard "Azurene" as remarkably adapted to the use of the laundress; and applicable on the large scale to bleach goods, where perfect whiteness is sought for.

Respectfully,
(Signed)

A. A. HAYES, M. D.
Stato Assayers for Massachusetts.

From Conrad Semper, Chemist, Phila.

I have tested the sample of Azuréne or Concentrated Indigo, and while I have found it four to five times stronger than the ordinary blues, as well as in every way suitable for all LAUNDRY purposes, I have also found it free from Oxalic Acid, which is a deadly poison, and destructive to all fabrics, and which is so extensively used in the manufacture of Indigo Blues to make them soluble. I can highly recommend it to every housekeeper for use in the laundry.

1846.

ESTABLISHED.

# Carlisle

WHOLESALE AND RETAIL DEALERS IN

Hardware, Cutlery and Guns,

Iron, Nails, Paints and Oils, &c. CONSTANTLY FOR SALE

(PHILADELPHIA AND NEW YORK,)

PERFECTLY

Liste and Sylvan Greens and other Fine Colors,

# Sessenaye French Zinc, &c.

Particular attention is called to the Sylvan (New) Permanent Green. It is exquisite in tint and absolutely permanent No poisonous chemicals used in its manufacture, in shade.

# HARRISONS'

# Paint and Varnish Remover.

For Painters, Furniture and Carriage Makers, Printers and Family Use.

It will remove the hardest and oldest paint from any surface in about 30 minutes, without scraping, and without injuring the wood or making it untit to receive fresh paint.

It will remove printers' ink, of all colors, from type, cylinders, &c., more effectually, cheaper and quicker than any other material.

It will remove varnish and paint from coaches and carriages, and make an old wagon, by fresh painting, It will remove varnish from elaborately carved or plain furniture, and prepare it for oil.

It can be used in a diluted state in every household to clean grease from furniture, painted walls, dishes,

&c., &c., without soap.

It washes off with water, taking the paint, varnish, or oil with it.

If applied as directed, it is guaranteed not to injure any surface upon which it may be used.

# CERTIFICATES

FROM THE PAINTERS OF PHILADELPHIA.

We take great pleasure in stating that we have been using the "Patent Paint Resolvent" for the last two years, and have been satisfied with the work performed with it, We consider that it is not only an excellent substitution for the old mode of burning, but a much cheaper and easier method of accomplishing the same object, leaving the wood or other surface operated upon in a better condition for receiving and retaining new paint than when taken off by burning and scraping. With confidence we recommend it to the use of the trade.

Were respectfully.

W. M. Carter, 214 South Fifth Street.
J. S. Bean, 140 South Third Street.
W.m. McCarter, 214 South Fifth Street.
Richl & Folwell, 303 Arch Street.
D. Steaff, 506 North Tenth Street,
John Gibson, 125 South Eleventh Street.
J. Patterson, 1833 Spruce Street.
B: F. Kelly, Fifth above Market.
C. White, 249 South Fifteenth Street.

Collins West, 302 South Second Street.
Joseph Chapman, 530 North Tenth Street.
G. W Mactigue, Fifth and Prune Streets.
John Wilson, 518 South Ninth Street.
R. D. Evans, 218 South Sixteenth Street.
J. Gibb, Sixteenth and Chestnut Street.
D. H. Beker Equith near Chery. R. H. Baker, Fourth near Cherry.
B. Cohen, Eighteenth near Walnut.
A. Spoeer, Julianna near Callowhill. And many others.

D. McMANUS

FROM CARRIAGE MAKERS. Gardner & Fleming, 214 South Sixth Street. G. W. Watson & Co., \ \} 1217 Chestnut Street.

George Dodd & Son. Wm. D. Rogers. And others. FROM PRINTERS.

Philadelphia, 607 Sansom'Street. We are using Harrisons' Patent Resolvent in our establishment, and can recommend it to all Printers for cleaning cylinders, types, steel and wood engrayings, &c., as a reliable article; not only cheaper in its application, but more expeditous in its working, than alcohol, benzine or concentrated lye.

KING & BAIRD, Printers. D inforth Locomotive Works, Paterson, N. J., June 4, 1869. I have successfully used Harrisons' Resolvent in removing very hard, old Paint from Locomotives and Tenders, in place of the old and expensive mode of burning off, and can strongly recommend it as a reliable article, and great saving of time and money to painters.

Signed,

ANDREW D. BARTON, Foreman Painter. Machine Shop, Camden & Amboy Railroad, March 2, 1869. I lately purchased some of Harrisons' natent Paint Resolvent, and used it to remove six conts Bone-black and Copal Varnish, so firmly set il at a scraper would scarcely touch it; the Resolvent removed it most effectually, and has my very cordial recommendation. Signed, H. J. BENNET, Painter.

General Contractor's Office, 927 Market Street Messrs. H. B. & Co.—Gentlemen:—I have made a series of experiments with your Paint Resolvent on Locomotives, Tenders, Ships. Cars, and other objects. I find that for removing old Paint or Grease it is all that could possibly could be wished, leaving the surface in a better condition than the old method of burning, and more suitable for receiving and retaining new Paint. In comparison with the expense of other processes I found the Resolvent to cost about one-eighth; there being little or no labor required in its use. Signed,

No. 15 EAST MAIN STREET.