DRY GOODS, TRIMMINGS.

INVISIBLE
EMPRESS TRAIL SKIRT,

THE NEW SHAPE FOR

Spring, 1867,

IN

J. W. BRADLEY'S
DUPLEX ELLIPTIC

(OR DOUBLE SPRING,)

SKIRTS,

The handsomest and most comfortable style yet introduced. SEE ALL FASHION MAGAZINES. Also, its New Shape in PARIS TRAILS, PRIDE OF THE WORLD, and TIP-TOP STYLES.

FOR SALE EVERYWHERE.

AT WHOLESALE by all the leading Notion and Dry Goods Houses in Pittsburgh. Also, by Sole Owners of Patent and Exclusive Manufacturers,

WESTS, BRADLEY & CARY,
97 Chambers Street,
mh18-57wt NEW YORK.

EMPRESS TRAIL,
PARIS TRAIL,
PRIDE OF THE WORLD,
TIP TOP SKIRTS,
FOR SALE AT
F. H. EATON'S,
17 Fifth Street.
mh9

RISTORI!

For the Ristori Season.

KID GLOVES, all colors;
NECK TIES;
FANCY BOWS;
RISTORI BOWS, etc.,

JUST RECEIVED AT

F.H. EATON'S,

17 Fifth Street,
apl-tr

1867.—NEW SPRING GOODS.

MACRUM & CARLISLE,

No. 19 Fifth Street,

HAVE JUST OPENED A SPLENDID ASSORTMENT OF

JET, AMBER AND CRYSTAL

Dress Trimmings and Buttons,

HAMBURG WORK AND REAL LACES;
SUPERB ENGLISH RIBBONS, all shades;
ENGLISH GLOVES, points of trim;
GLOVE SILKS, 2 buttons, all shades;
ENGLISH AND GERMAN HOSIERY, all sizes.

THE "STAR" SHIRT,

On hand and made to order.

Invisible Empress Trail Skirt,

New shape for Spring, 1867.

"LE ELEGANTE,"

New dress Skirts for 1867.

Wholesome Corsets, Patent Forms.

A complete assortment of

PAPER COLLARS AND CUFFS.

☞ CITY AND COUNTRY MERCHANTS will find our Wholesale Department well stocked with goods suitable for their sales, which we guarantee to sell as low as any Eastern Jobbing House. Come to call as low as any Eastern Jobbing House.

MACRUM & CARLISLE,
No. 19 Fifth Street.
mh9

NEW GOODS! NEW GOODS!

AT

JOSEPH HORNE'S & CO'S.

Having made a second addition to our already large stock of

SPRING GOODS,

We are prepared to offer inducements, both in price and assortment, in

Embroideries, Handkerchiefs,
Gloves, Hosiery, Eagle Trimmings
Buttons, Fancy Dress Trimmings,
and Fringes, Velvet Ribbons,
Colored and Black Velvets,
Guipure and Chantilly Laces,
Real Thread and Pointe Lace,
Neck Ties, all styles and colors,
Cotton Batting, Buckles
and Belts, Fine Opera Fans,
Ladies', Misses' and Gents'
Spring Under Wear,
Also, a new 8 4 Kid Glove,
Introduce Empress Trail
Skirts, in Single and
Duplex.

A large assortment of

Gents' Neck Ties, Scarfs
and Bows, Suspenders, Shirt Fronts, &c.
Morrison's Star Shirts,
Morrison's Hat Flowers,
Spring Styles Bonnet
and Millinery Goods,
Trimming Ribbons, Bonnet Ribbons,
Flats and Fan 7, all widths.

OUR WHOLESALE ROOMS, up stairs, will be found complete in all Departments. Dealers will find it to their advantage to give us a call. Prices as low as Eastern Jobbers.

27 and 29 Market Street.
fe22:r200

NEW GOODS! NEW HOUSE!

New House! New Goods!

WM. H. MILLER,

(Formerly of RATON, MACRUM & CO., late of F. H. EATON'S.)

WILL OPEN

About the First of April,

AT

NO. 64 MARKET ST.,

WITH AN ENTIRE NEW STOCK OF

Trimmings, Lace Goods,
Embroideries, Ribbons,
Gloves, Hosiery,

And all GOODS usually kept in a

FIRST CLASS TRIMMING
AND
Notion House.
mh19-r2

CARR, McCANLDESS & CO.,
(LATE WILSON, CARR & CO.,)
WHOLESALE DEALERS IN
FOREIGN AND DOMESTIC DRY GOODS.
No. 94 Wood St.,
Third house above Diamond Alley,
PITTSBURGH, PA.
apl-tr

DRY GOODS, TRIMMINGS.

BLACK LUSTRES;

Colored Alpacas,
Dress Goods,
Spring De Lains,
New Prints,
French and Domestic Ginghams,
White Goods,
Striped Dimities,
Table Damasks,
Napkins,
Irish Linens,
Sheeting and Shirting Muslins,
Cassimeres, Tweeds, Jeans,
Bonnets, Hats,
Ribbons, Flowers, &c., &c.

A LARGE STOCK,

Wholesale and Retail,

AT

WM. SEMPLE'S,

180 and 182 Federal St.,

ALLEGHENY CITY.

ap6:tr12

1867. SPRING. 1867.

ARBUTHNOT,
SHANNON
& COMPANY,

IMPORTERS AND JOBBERS OF

Dry Goods and Notions,

Offer their large and attractive stock of

NEW GOODS AT EASTERN PRICES,

FOR CASH.

DRESS GOODS, WHITE GOODS,
DELAINES, PRINTS, GINGHAMS,
CHECKS TICKS, CLOTHS, CASSIMERES,
COTTONADES, JEANS, BLEACHED
AND BROWN SHEETINGS AND
SHIRTINGS, SHAWLS, TIES,
HOSIERY, GLOVES, and &c.

Buyers are invited to call and examine our goods and prices, at

No. 115 Wood Street.

ARBUTHNOT, SHANNON & CO.
C. ARBUTHOT, W. T. SHANNON.
RICHEY. J. G. STEPHENSON.

78 AND 80 MARKET STREET,

Daily Arrivals.

In addition to our stock of

NEW SPRING GOODS,

WHITE GOODS,
EMBROIDERIES, LACES,
HANDKERCHIEFS,
BASIN AND BONNET
TRIMMING AND
NECK RIBBONS,

of every width and shade,

Best quality of SATIN RIBBON, all widths
CRINOLINE, BLACK and WHITE,
BRAIDS, FRINGES and BUTTONS
FINE Lavender KID GLOVES; HOSIERY
and GLOVES of every description.
NEW STYLE of HOSE just received for Ladies, Misses, and Children.
CORSETS AND HOOP SKIRTS, all makes.
A full line of GENTS' FURNISHING GOODS.
Constantly in Store and to be MADE TO ORDER.
SALE ROOM, 2d STORY.
DEPARTMENT, a full assortment at Eastern Prices.

MACRUM, CLYDE & CO.,

78 and 80 Market Street,

mh18-r

THE PLACE

TO BUY YOUR DRY GOODS,

IS AT THE

NEW STORE

OF

J. M. BURCHFIELD & CO.,

No. 67 Market Street,

NEXT DOOR TO THE SIGN OF THE "BIG BOOT."

LINEN SHEETING;
PILLOW LINEN;
IRISH LINENS, warranted pure flax;
SHIRTING MUSLINS;
UNBLEACHED MUSLINS, from 10 cents up;
BLEACHED
BEST MOUS DE LAINS 31 cents;
CALICOES, from 10 cents up;
HOUSEKEEPING GOODS, a full assortment;

THE ONLY ENTIRE NEW STOCK IN THE CITY.

67 MARKET STREET.

27 FIFTH STREET.

NORWEGIANS, ZEPHYR KNIT
SHAWLS, HOSIERY, GLOVES IN
LINEN AND KID, LACE
COLLARS, EMBROIDERED
HANDKERCHIEFS, FANCY
FANS, RICHONS, DONNERIEL,
LIBBEY & CO.'S CORSET HOOP
SKIRTS, &C., AT

DENNISON'S,

NO. 27 FIFTH STREET.

LEGAL.

ORPHANS' COURT SALE OF

REAL ESTATE,

In the Borough of Lawrenceville.

By virtue of an order of the Orphan's Court of Allegheny County, the undersigned, guardian of Sarah E., Isaac, Joseph and Minnie Johnston, minor children of William Johnston, dec'd, will offer at Public Sale, at the premises, in the Borough of Lawrenceville, at 10 o'clock, A. M., on

Wednesday, March 27th, 1867,

All that certain lot of ground situated in the said Borough, bounded as follows: Beginning at a point on the south side of Butler street, 21 feet 7 inches from an easterly direction from the corner of said Butler and Allen street; thence extending in front, along the line of Butler street, a distance of 20 feet 1 inch; thence in a southerly direction 107 feet to an alley ten feet wide; thence in a westerly direction, along the line of said alley 27 feet 8 inches; thence in a northerly direction 98 feet and ¼ inches, to Butler street, the place of beginning, on which is erected a two-story house.

Terms made known on day of sale, or on application to

G. S. BATES, Guardian,
mh11-r12s Butler Street, Lawrenceville.

IN THE MATTER OF THE APPLICATION OF THE JEFFERSON MEMORIAL CEMETERY, of Allegheny county, for a charter. No. 34 June Term, 1866, in the Court of Common Pleas of Allegheny county.

Notice is hereby given that an application has been made to the above Court for a charter of incorporation, and that, at the next term of Court, the application will be presented. All persons interested are required to appear and show cause why the decree and order will not be granted.

JONES & FRANKLIN,
Attorneys for Applicants.
mh8-w2w

NOTICE.—Whereas, letters of administration to the estate of Mrs. ISABELLA WATT, late of south Fayette township, Allegheny county, Pa., deceased, having been granted to the subscribers, all persons indebted to said estate are requested to make immediate payment, and those having claims to present them, properly authenticated, for settlement, to

JOHN T. LENNETT,
JOHN T. LENNETT,
Administrators.
mh15-w7t

The Pittsburgh Gazette.

MONDAY, APRIL 8, 1867.

MANUFACTURES OF PITTSBURGH.

ALLEGHENY CITY, April 8, 1867.

EDITORS PITTSBURGH GAZETTE:—Having given in my last letter several rules, or formula, to gain the proportions of steam boilers, i. e., to get, as we might say, the superficial proportions, we must now turn our attention to the thickness of plates used, the way of joining the plates, the rivets, &c., and style of construction. The thickness of boiler plates used throughout the world vary considerable. For a forty-eight shell, intended for a pressure of one hundred and twenty pounds to the square inch: the plates of the American boilers vary from one-fourth to three-eighths, those of French and Belgian boilers from one-fourth to five-eighths, while those of English boilers from ¼ to ⅝, the thickness varying, however, with the strength of the iron used: the best American being the toughest, stuck, according to the tests of Yorkshire Ironmaster, plates will bear a "tensile strain" of twenty-four tons per square inch, the best Staffordshire (Thorneycroft) twenty-one tons, whilst the best American will withstand the enormous strain of thirty-one tons per square inch of section, and as the manufacture of American iron is improving considerably in some places, it will comeinto almost exclusive use in this country (*e. g. people will not look at Aral con; the greatest evil of this neighbor, hood.*).

A great deal has been written, and much more controversy will yet arise, as to the use of the so called thin plates, in the manufacture of boilers; and it is our bounden duty, as far as our experience and knowledge can aid us, to denominate the respective values of thin and thick plates. In one of Sir Lanuburd Brunel's experiments at Woolwich, some years ago, on rivetted joints, it is stated that ⅝ inch rivetted plates were practically as strong as 7-16 or ½ inch ones; this is the case with longitudinal seams, but circular seams are different, and the strength increases with the thickness of the plate. The strength of cylindrical boilers is due mainly to the perfect and steadiness, and no less to the symmetry of the joints, and this is owing more pure, sound and stronger than thick iron. A consideration, however, must be made in regard to different brands, and as they differ in the strain they can bear, we will only take the best, i. e. the brand that has withstood by experiment the greatest strain. The strength of boilers is in direct proportion to the thickness of the plates and inversely as to their diameters. For said reasons the plates cannot be much thicker than ½ inch thick, or more than ⅝ inch. If thin they cannot be made properly tight, and if thick considerable strain is found in riveting them. The rending force which a cylindrical boiler will bear without permanent distortion, is equal to the tensile strength of the iron employed in the manufacture, and direct to the ordinary tensile strength of cast iron, which is equal to 50,000 pounds, one-third of this, however, may be regarded as the extreme limit, i. e. should bear, say 18,000 pounds; but experiment will show that we are not yet near this sum before any difference in quality of iron, and also to bring in a proper margin within the limit of safety. The following will be the limit of safety. The following numbers representing the strain per square inch of section we have reckoned for this purpose:

	Pr. sq. in. of sec.
Common Yorkshire plates	2,500
Best do. do.	2,500
Common staffordshire plates	4,000
Best do. do.	4,000
Best American	5,000

The thickness of plates, as to their durability, has an important bearing on the cost and maintenance of boilers; no decisive experiments have as yet been made on so knowledge in this direction; although it is certainly true that ⅜ Lowmoor plates are strained in this country, whilst ⅞ of the same brand fall after a few months' usage in England. This plainly shows that thin plates are best; the wear and decomposition of fire plates is likewise in connection with the blistering, furrowing and cracking. Blistering and cracking only occur from the action of intense heat on the plate connected directly to the water as fast as it comes in contact with the plate will in any perceptible degree, which at 212 degrees Fah. it may exceed that of the water, by from 40 to 50 degrees. Plates that blister, crack certainly fail, because they do not convey the heat with proper rapidity. If plates were imperfectly cast, for instance, water may be boiled in a piece of cast iron, and in the same manner as in paper over as intense an heat as that under metals is boiled, and the inflammable substance will not be destroyed; it conducts the heat imperfectly, retains it, becomes red hot and cracks. Plates that blister or