Industry in Historic New Castle??

1926 View (and now??) -- it's somehow invisible

THERE are few communities to-day which have retained their early American flavor as completely as has New Castle, Delaware...

While there are some factories with their resultant nondescript housing, they are all grouped near the branch-line railroad which comes in to the west of the town proper. The compact older portion is still complete and removed from too much "progress."

NEW CASTLE, DELAWARE an EIGHTEENTH-CENTURY Town Wm. D. FOSTER White Pine Series of Architectural Monographs

Industry in Historic New Castle??

YES. New Castle industries have come and gone since 1833

They brought people and jobs. As with Wilmington (think Bancroft Mills and Du Pont departments), when they left, so did many of the people.

New Castle had factories for making:

railroad engines flour

iron pipe cotton and woolen fibers

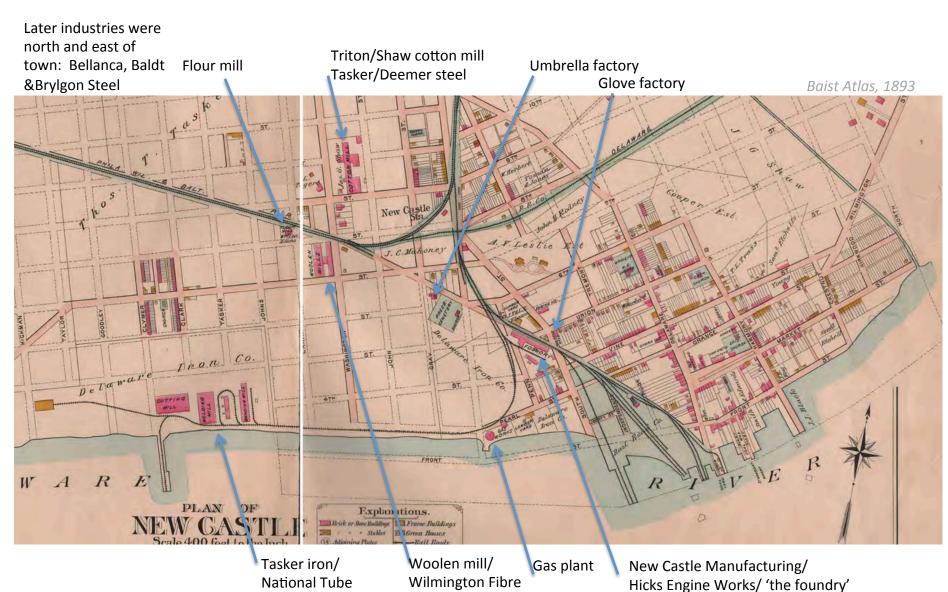
anchors illuminating gas gloves, shirts, umbrellas artillery shells

rayon fabric vulcanized fiber

hardened steel for railroad switches and brakes

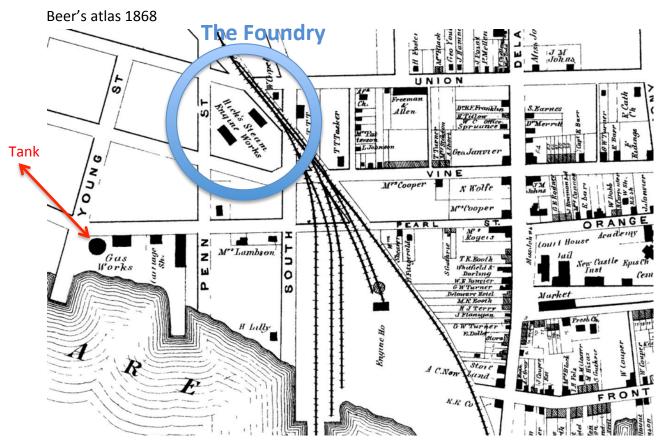
bulk polypropylene for bottles etc

Industrial sites in New Castle before 1900



The First Heavy Industry in New Castle:

New Castle Manufacturing Company/Hicks Engine Works



Initially not for engines: founded in 1833 for cotton, wool, grain, plaster of Paris...

In 1837 the company started to make engines on contract to RR.

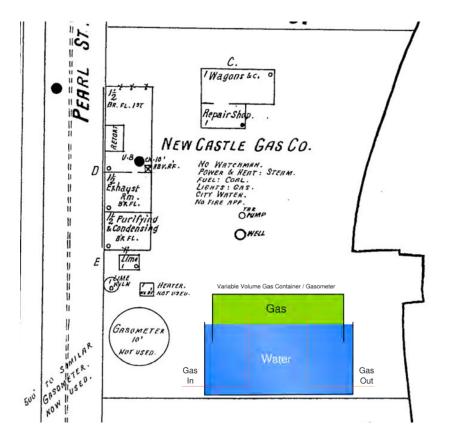


The only surviving engine built in New Castle is the 1848 'Memnon', #57, now in the B&O museum in Baltimore. It was built to haul coal in WVa, then used to haul troops for the North in the civil war.

New Castle Gas Co

Thermal decomposition of coal -> methane, hydrogen, carbon monoxide, tar

- A pier gave easy access to the raw material, coal.
- Byproduct (tar) could be pumped into the well (!).
- Gas could be pumped into a nearby 'gasometer', a storage device with a floating lid which provided absolutely constant gas pressure (important for distribution into nearby houses).







Triton Cotton Mill (later Deemer Steel)

1.000

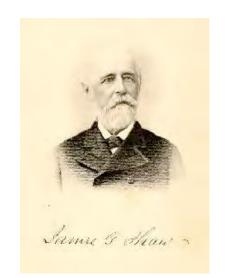
4.000

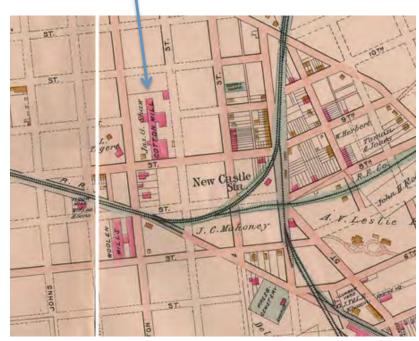
c1861-1900, Washington St., Shawtown

From Speculator (1860) to Plant Owner and Developer

321 Brumfield	Mary	14 F	WPa		
321 Reynolds	Andrew C	48 M	WDel	Dentist	
321 McClain	Edward	32 M	WPa	Clerk	
321 Evans	John	23 M	WDel	Commision Merchant	
321 Caussey	William	23 M	WDel	Lawyer	
321 Cann	William	28 M	WDel	Merchant	2,000
321 Shaw	James G	30 M	WРа	Speculator	10,000
321 Plesants	Charles F	28 M	WPa	Clerk	1.7
321 Hartis	George	40 M	WEngland	Ostler	. 1 1
321 Hartis	Ann	25 F	WEngland	Domestic	1
321 Holladay	Sarah	18 F	Wireland	Domestic	
321 Miller	David	18 M	NDel	Servant	D. B. O. L.

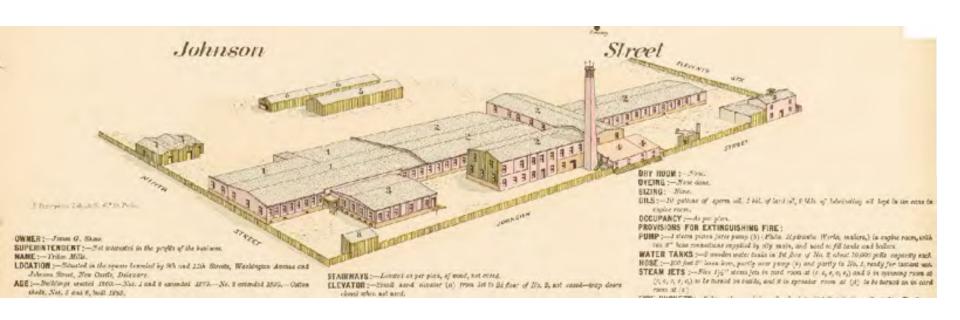
In 1857 he moved to NC and bought land west of town (including Shawtown) – former Kensey Johns farm.
In 1860 he built a cotton yarn factory to be run by a Boston co. But the civil war...





Triton Cotton Mill/Deemer Steel

After the war, Shaw bought cotton fiber machinery himself, joined with an experienced partner, James Knowles and started Triton Mills, which lasted until the 1880's. At one time he was the largest employer in town.



Occupations in the Town of New Castle (1870)

In 1870, working in a cotton mill (presumably Triton Mill, founded c1861) was the third most common paid occupation, after laborer and domestic (not counting 'at home' and 'without occupation'

There were 151 occupations listed.
One person each was a gold beater,
telegraph operator, sail maker, watch
repairer, book gilder, cigar maker,
hedger, distiller

Around 1880 Triton Mills closed

– put out of business by
competition with mills in the
South much closer to the source
of the cotton.

Number	Real Value	Personal Value	
	(Avg)	(Avg)	
736			
343	9,177	1,955	
160	16,422	8,136	
123	1,028	143	
92	1,000		
84		125	
28	1,625	276	
19	17,214	4,573	
12	1,700	335	
11			
11	6,750	856	
10	4,200	593	
9	1,000	200	
8	750	133	
7	1,133	130	
7	14,200	23,028	
7	1,500	200	
7	1,000	40	
	736 343 160 123 92 84 28 19 12 11 11 10 9 8 7 7	Number (Avg) 736 343 9,177 160 16,422 123 1,028 92 1,000 84 28 1,625 19 17,214 12 1,700 11 6,750 10 4,200 9 1,000 8 750 7 1,133 7 1,500	

82

Four of the 6 steel works in Delaware in 1910 Were in New Castle

(Directory of the Iron and Steel Works of the United States)

SUPPLEMENT TO THE DIRECTORY.

DELAWARE.

Baldt (The) Steel Company, New Castle. Acid open-hearth castings for locomotives, ships, ordnance, electrical work, etc.—Page 320.

Brylgon Steel Casting Company, New Castle. Bookwalter machinery, electric motors, generators, and other steel castings; also high and low carbon, manganese, and titanium steel castings.—Pages 320-21.

Deemer Steel Casting Company, New Castle. Steel castings by the Paxson-Deemer process.—New.

Diamond State Steel Works, Wilmington. Acid and basic open-hearth steel castings for their own use.—Idle and for sale. See page 321.

Lobdell Car Wheel Company, Wilmington. Building; acid open-hearth steel castings for the use of the company and for sale. Also makes cast-iron car wheels, chilled rolls, and machinery castings.—New.

Tropenas Steel Company, New Castle. Tropenas castings for automobiles; also manganese steel castings for crushers, safes, and railroad purposes; also vanadium, chrome, and nickel steel castings.—Page 322.

MARYLAND.

Powers (The James F.) Foundry Company, Elkton. Machinery steel castings by the Paxson-Deemer process; also alloyed castings.—New.

DISTRICT OF COLUMBIA.

Naval Gun Factory, United States Navy Yard, Washington. Tropenas steel castings for ordnance for the Navy.—See page 324.

VIRGINIA.

Newport News Shipbuilding and Dry Dock Company, New York. Works at Newport News, Va. Tropenas steel castings for ship fittings for the company's use; also steel castings for sale.—Page 329.

WEST VIRGINIA.

West Virginia Malleable Iron Company, Point Pleasant. Malleable castings but can make open-hearth steel castings.—See page 333.

Wheeling Mold and Foundry Company, Wheeling. Acid open-hearth steel rolls and rolling mill and other heavy castings; also gray iron rolling mill, machinery, chilled rolls, and other heavy castings.—New.



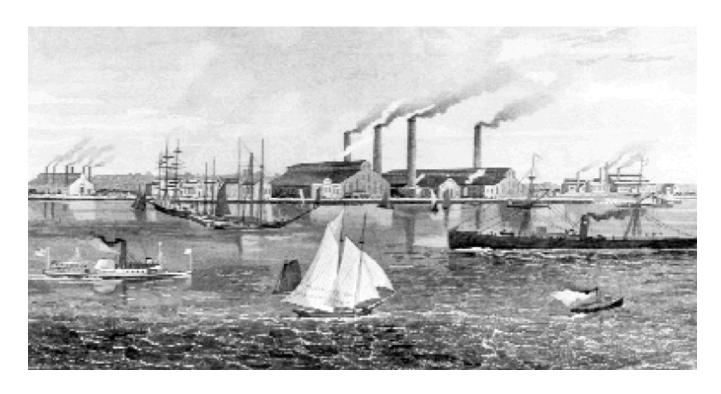


Portrait c1900 of Selden Scranton Deemer (1861-1934) and Kate Deemer. He had been superintendant of Brylgon Steel Casting Co, built 1903. He lived in the Lesley/Deemer mansion.



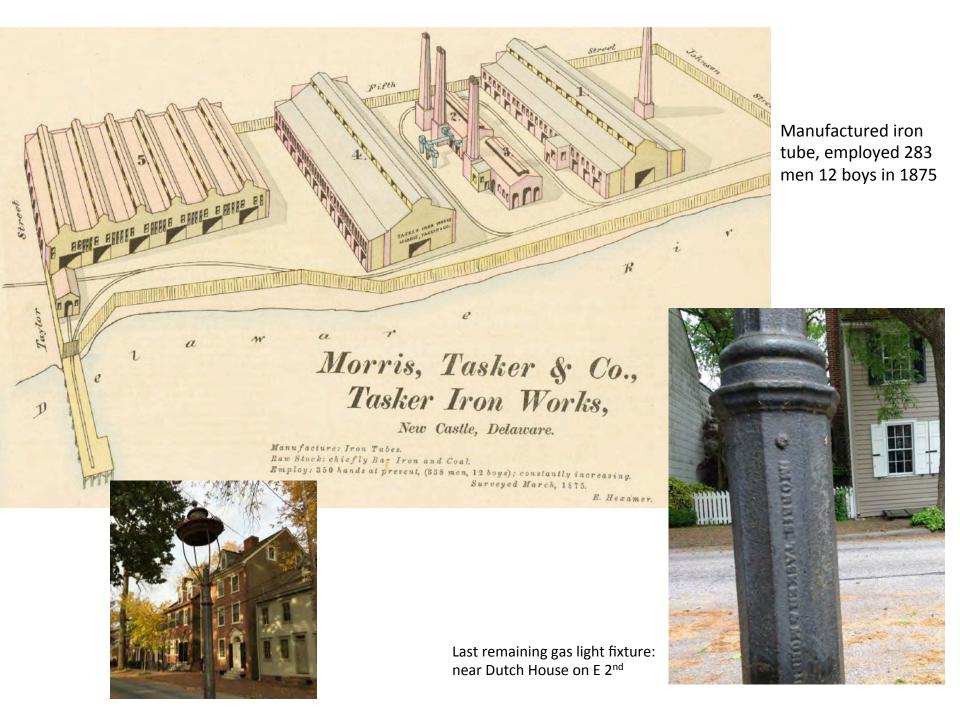
After his death, the mill was sold to Newlin Booth

Tasker Iron Works (1872)





The land was originally granted by Penn to cousin William Markham, and called "Markham's Hope". Recall that he was fired by Penn c1701 because of the problems of piracy in the colony.



In 1864 Shaw sold land between the river and Triton Mills to Thomas Tasker who was one of the owners of the Morris Tasker Iron Works in Philadelphia.

In 1872 Tasker moved most of his plant to Delaware (same name). It was reincorporated as Delaware Iron in 1876 with his son as president.

About 1899 it became part of National Tube Company, a "Trust" -- a corporate monopoly organized in order to eliminate competition.

The company closed in 1900 and all assets were removed.

Workers in nearby Dobbinsville left.

Then new life when Baldt, Brylgon, Deemer & Edgar Allen steel mills opened nearby.

20 Pages

Pages 9 to 16





Our Art Department

can assist you in your advertising by making drawings and cuts. Phone us about it.

THE STAR PRINTING CO.

WILMINGTON, DEL. SUNDAY, JULY 3, 1910.

Lease on Life of Dobbinsville, Delaware's Deserted Village

Some of the Ruins in Village Just Below New Castle, Have Reen Restored-Thirty Families Now Living There-The Story of Dobbinsville

"Sweet Auburn." the deserted village of Goldsmith's poem, was due to "trade's unfeeling train. But unlike Auburn, which, to use the poet's words, "when once destroyed, can never be supplied," Dobbinsville is taking a new lease on

O Dobbinsville is a group of about 100 two-story houses, built in rows, and therefore , resembling a miniature city more than a village, about a half mile south of the centre of New Castle, Delaware. In 1872-3, when Thomas T. Tasker and Henry G. Morris removed a part of the well-known Paschal Iron Works, of Philadelphia, to New Castle, there was naturally an influx of fron workers to the little historical form. Perhaps a thousend men were employed by this new industry, known as the Morris las-ker Iron Works. Alexander B. Cooper, in his history of New Castle, records that: "In order to accommodate these people with houses convenient to their work. Richard J. Dobbins, a wealthy contractor and builder, of Philadelphia, about the time the plant was started, bought the land and creeted thoreon about 100 small two-story brick houses, adjacent to the works." These dwellings were arranged in five rows each of 14 to 21 houses extending from either side of Seventh street, two rows along Clark street, two along Clymer street, and the fifth row along Dobbins street, a small street between Clark and Clymer.

Dobbinsville's Better Days.

The devastation of Dobbinsville, like | times crowded into a single liffle four the population of Dobbinsville at the height of its better days were ever obtained, but there were probably any-

Where from some to the amount of the Mor-Nothing disturbed the general prosper-ity of this little city as long as the Mor-ris-Tasker Iron Works continued operations. The change of name to the Delations. The change of name to the Dela-ware from Company was only an inci-dent in the life of Dobbinsville. But, when, in 1839, the Delaware from Com-pany became a part of the gigantic trust of pipe and Lube companies, the doom of Debbinsville was scaled. The New Castle plant was closed down, and there being

> No Signs of Human Life. short time after the

der, for there was always the possibility of the iron works starfing up again. But after several years of vain waiting. all hope of the re-opening of the plant was given up. And in the meantine, the five rows of houses that made up Dobbinsville, through lack of use, and neglect, gradually went to decay. Shut-ters, doors and window sashes were blown by the wind and beaten by rain until they tottered down. The steps to the dwellings rotted away, the cellars filled with water, lesking roofs and open shutters let the ram inside, and slowly but surely, the little houses have As soon as the houses were completed taken on the appearance of old time they were occupied by the iron workers. runs. Weeds and rank vegetation have



HOW THE BACKS OF THE HOUSES LOOK NOW.



COWS PASTURING IN DOBBINS STREET.





THE UNINHABITED ROW ON CLARK STREET.

Making a New Start.

In the section of the little village cast of Seventh street, however, a new life is springing up. Mr. Dobbins, the builder. Along Clark street the whole row is ochad, in recent years, been willing to dispose of his houses, which originally cost

the greater number were taken by sprung up and grass and moss have enhanced in the foles and other families, it if the foles and other families, it if the foles and other foreigners one down when the houses were new. In the foles and other foreigners one of his houses, which originally each, and with entrains and shades, at the vindows, the parentals and the foles and other foreigners one of the foles and other foreigners one, and the foles and other foreigners one, the foles and other foreigners one, and the foles and other foreigners one of the foles are the vindows, the parentals are all the vindows, the vindows the vindows, the vindows the vindows the vindows, the vindows the vindows the vindows. The vindows the vindows the vindows the vindows are vindows, the vindows are vind

all that part of Dobbinsville west of Seventh, and his ment. But in the next rove, just beyond seventh street, except the sorner properties, there are no signs of human habits werend of the hones on the eastern part decay. Even closer is the new and the decay is the new and the decay. Even closer is the new and the decay is the new and the decay. Even closer is the new and the decay is the new and the decay is the new and the decay. Even closer is the new and the decay is the new and the decay is the new and the decay. decay. Even closer is the new and the old in Dobbinsville to be seen on Clymer old fynice street.
The lonses bought by the Leonards street, where two occupied inness stand, have been put in good repair and gradus, and there two occupied inness stand, ally, one or two families at a time, they have been occurred again. rains are apt to be reclaimed at any

New Life Duc to Steel Works.

And the rembitation of Dobbinsville, is, strangely enough, as showing the progress of the times, due in a large measure, not to an iron works, through which it first had its beine, but to the influx of tollers in New Castle's four new

steel plants the Baldt, the Brylgon, the Deemer and the Edgar Allen Company, Between 600 to 700, or even more, men

for a much smaller sum than it would take to build new ones, the old ones will be restored to their original condition Then the streets and pavement- will once more he laid out, the cows deposed of their masturage along the grass- streets, and Dobbinsville, in converte tion to the words of the poet and nonce destroyed, can never be supplied

will again spring up us an active and im-

I view National Tube CC Former Tasker Iron National Tube CC

Future site of Amoco polypropylene factory Built c1961, exploded October 22, 1980



Bethlehem Steel (artillery shells), Delaware Rayon, Printpack

(Deemers Beach)

Bethlehem Loading Company (1914—1919)

It and 14 similar plants were established around the country before the U.S. entry into the war (1917). The factories loaded artillery shells.



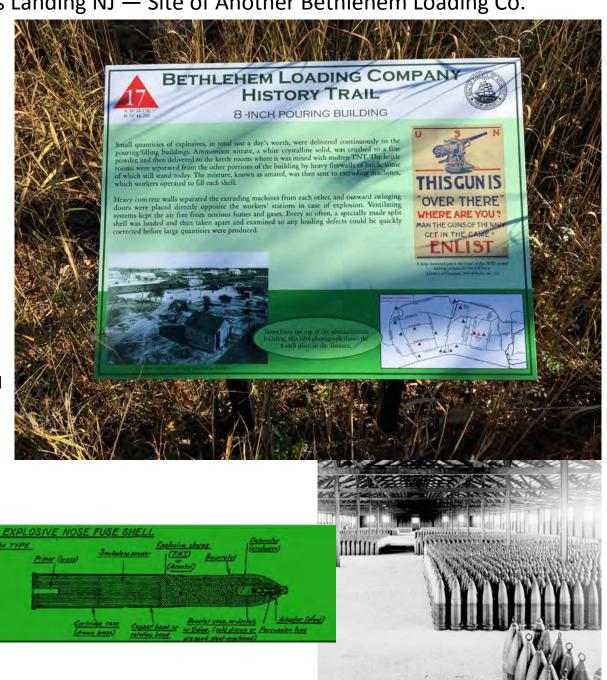
We can learn about the layout and functions of the buildings from a similar plant in New Jersey (1917-1918)

Estell Manor State Park, Mays Landing NJ — Site of Another Bethlehem Loading Co.



Bethlehem Loading Co, Mays Landing plant was one of 14 built nationwide. It employed up to 2000 people, and had loaded 134,000 shells before the war ended in Armistice Day, 1918.

The plant assembled the parts of 3,6, and 8 inch shells and filled them with molten TNT. Buildings were connected by trains which carried parts and finished shells.



Workers at the Bethlehem plant lived in New Castle.

-- recollection from Frances Haut, age 99, interviewed at Methodist Country Home

- The "Canary Cottage" near Witt's Bakery on Delaware was a rooming house for girls.
- It wasn't named for color of the buildings, but the color of their skins from working in explosive plant [with nitro compounds]

Bethlehem Steel, Delaware Rayon, Printpack

The Grantham Lane Industrial Site Still Active After 100 Years A few of the buildings, like the power plant structure are still in use.

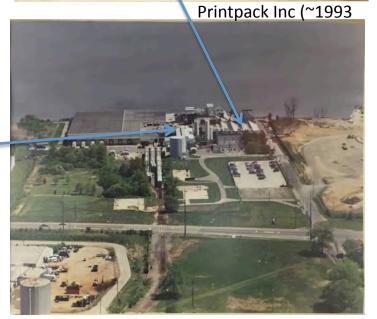
Delaware Rayon (1928)

	1914-1919	Bethlehem Loading Co	5
	1919-1926	Plant closed	Power Plant
	1926-1946	Delaware Rayon	
	1946-1953	Mohawk Carpet –rayon carpet	
	1953-1959	Plant closed	
	1959-1967	American Viscose – cast/	
extruded films			
	1967-1973	Amoco - same	
	1973-1986	Crown Zellerbach – same	

James River – same

Peliwage Rayon Contains New Yarde Delawage August 1995

Power Plant =



Two other active industrial sites: Woolen Mill/Wilmington Fibre, Baltd Steel/Speakman co.

1996- present Printpack Inc –films used in

1986-1996

packaging

Printpack Inc.

Grantham Lane & River Rd.

Produces extruded plastic film, prints on it, and delivers it to the product manufacturer.



At the other end of Grantham Lane, Grantham House, National Historic Register, roof of front section collapsing, surrounded by refrigerators and cars, adjacent to a junkyard and marshes. Early settler (c1700?), sons fought in Rev. War

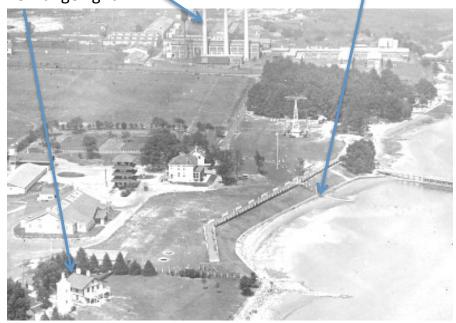




Bethlehem Steel, Del. Rayon, Printpak

Deemer's Beach (1925-35)

Inner range light











The Umbrella Factory

425 Umbrella Row (a.k.a Gray St).

between the Presbyterian Cemetery & former Gambacorta car dealerships



Built c1880 by A. V. Lesley as an umbrella factory, but lasted only a short time. Converted to four houses (two since demolished).

The adjacent "rural cemetery" was once only accessible by rail!

The adjacent street was the subject of a prominent 1991 lawsuit between Brosius-Eliason Co. and John DiMondi about and what constitutes a street. http://de.findacase.com/research/wfrmDocViewer.aspx/xq/fac.19911115_0005.DE.htm/qx

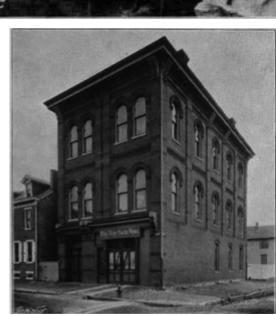


New Castle Cotton Glove Factory (c1895?)

&

Shirt Factory





HOMES OF J. T. AND L. E. ELIASON,
VIEW ALONG FIFTH STREET, LOOKING NORTH FROM SOUTH STREET

Multi purpose: glove factory, newspaper, fire hall, Red Men's hall

From <u>Ideal New Castle</u>, 1899, Commercial Club

INDUCEMENTS TO MANUFACTURERS.

Beautiful sites. Free land.

Cheap labor.

Excellent transportation facilities, both by rail and water.

Low tax rate. Good telephone and telegraph service. Delightful climate.

Trolley line to Wilmington, both passengers and freight carried.

Cool summers. Pure water. A healthy city.

Raw material near at hand. Cheap freights

Both electricity and gas available.

June 2, 1903 Agreement between Trustees & Baldt Steel

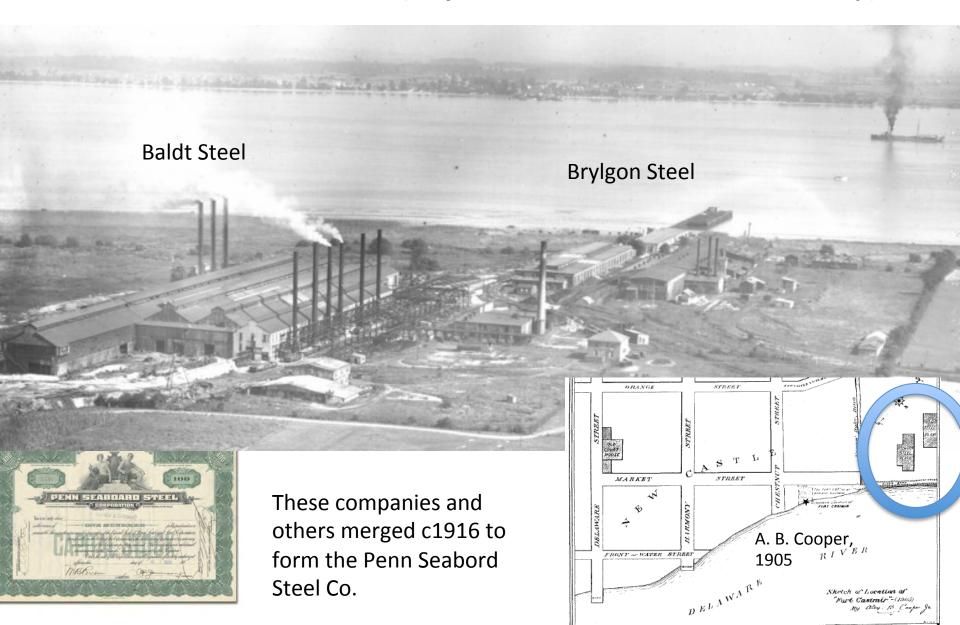
"Whereas the said Trustees are willing and desirous of facilitating and assisting in the establishment of said industry and company,

Baldt erect an open hearth steel plant costing \$200,000 on land purchased from Francis Janvier, a Trustee

The Trustees will pay \$6,000 in installments

Whereas, owing to the abandonment of many of the manufacturing interests of the City, the City of New Castle has for some years been in an unfortunate financial and industrial condition, whereby many inhabitants of the City have been unable to obtain employment and the welfare of the whole City materially injured; ...

North of New Castle (adjacent to Glebe & Cemetery)

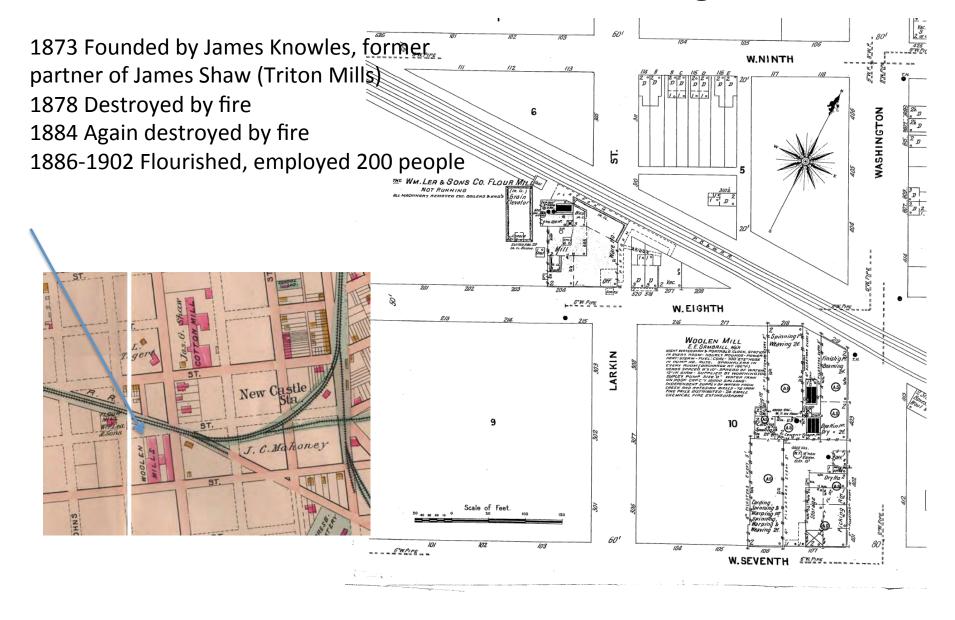


Speakman Co,

Founded 1869; recently moved from 30th St., Wilmington to the Baldt/Brylgon site in Twin Spans area. Employs > 100 workers. Manufactures plumbing fixtures Some onsite manufacturing, mostly assembly of materials from China.



Knowles Woolen Mill --> -> Wilmington Fibre

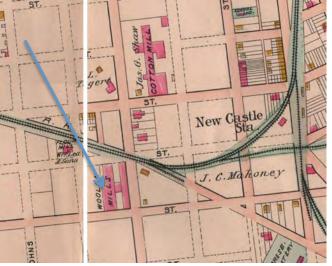


Wilmington Fibre Specialty Co.

Along with Printpack, the last manufacturing companies in New Castle







1904 Founded in Wilmington

1920 Moved to New Castle, made fibre parts like gaskets.

1970s Began fabricating plastic products like guitar picks

'The Manganese' (AMSCO, American Manganese Steel)



1909 – Tropenas Steel, later Edgar Allen, AMSCO, ABEX – closed 1986 Produced work-hardening manganese steel by Tropenas process used in railroad switches and brakes.

The presence of the American Manganese Steel Plant, as I knew it, had considerable economic effect on the New Castle area through the years. Many of us were clothed, fed put through school and lived on earnings from the sale of railroad frogs, steam shovel buckets, drag buckets, points, lips, links and the vast variety of steel castings fabricated here at New Castle. The molds were made by Roy White, Ed Cline, Dick McGrory, Lou Stidham and others, all working under the watchful eye of Grover Ingle, the foundry foreman. The castings would be shaken out and sent over to the annealing furnace where Ed McDaniel's team would don their asbestos suits and fasten the crane hooks to the pile of six or eight tons of cherry red steel. He would then guide Dominick Chirilli's crane over the water pool and signal "lower". The resultant steam explosion and flying water was a dramatic sight to witness.

The Plant was not an easy place to work as indeed no steel foundry is. It was physically demanding on its workers. The air was always dust filled and you breathed it. But somehow you had pride in associating yourself with this work. It was an invaluable experience working with men like Alex Garneski, Joe Medora, Ralph Divito, John Gilkey, Joe Armpriester, Joe Rossell, Harold Emery, Bill Dalby, Dominick DiSabatino, Fred Rush, Edgar Bowen, Mope White, Bill Denny, Grover Ingle, Harry Ingle, Chick White, Bill Payton, **Charlie Hewlett**, Joe Mullin, Frank Kelly, Tony Esopi, **Hughie Ryan** (Sr), Ed Butler, Ed Cline, Horace Conover, Harry Gallagher, **Bill Peden**, Barney Williamson, Cliff Ivery, Francis White, Johnny Proud, Earl DiSabatino, Johnny McDevitt, **Mike Indellini**, Emmett Covelli, **Frank Yaccucci**, Johnny Hall, Claude Phillips, Norman Banks, Don Nichols and many others.





July 4, 1927

1927 One week after Lindbergh's flight to Paris, Bellanca's *Columbia* flew to Berlin



1928 Bellanca moved his plant to New Castle





Industry South of New Castle, 1926

Future site of Amoco polypropylene factory Built c1961, exploded October 22, 1980



Bethlehem Steel (artillery shells),

(Deemers Beach)



Evacuees return from shelters

Continued from A1

Everyone waiting at the barricade had felt or heard the blast, or

Some of those at the barricades had come from Dobbinsville, a collection of older row houses, which was one of the areas evacuated by firemen and police. A few spent the night at a emergency shelter set up at William Penn High School.

In Dobbinsville this morning, evidence of the power of the blast could be seen. In one home, the whole window frame was dislodged. In another, the broken window and torn screen revealed a house plant hanging in a pot, wilted from the

One woman said she was in her kitchen when the blast went off, breaking her picture window in the living room where her husband was sitting. She said she kept shouting to her husband, asking what had happened, but he just kept saying, "Oh, my God, Oh, my God.

She started around to the neighbors to see who else had damage; but one man told her, "The hell with of town," She did, along with several hundred other area residents, who were evacuated because of fear that there might be further explosions.

The woman did not want to give

Kay Reeder, who lives on Center pital and released constant the feether based all and awounds thought at first he had broken the window again.

This morning Mrs. Reeder stoher sidewalk as smoke still rose from the plant. She said that living for granted that sooner or later they're going to go up."

Don McLaren, an employee of Larmore Inc., was working at the ther away at 52 Juniper St. in Washmoving company's warehouse at 1. Bellecor Drive, about 6:30 p.m. "It was like an airplane had dropped on

Roberta D'Anna, 16, was in-a hurry at 7 last night as she spoke of the blast from her home at 221 Grantham Lane, just across the road from the plant. "I came back to get my camera. We have to get out of here fast. A couple-more tanksare about to go.

Miss D'Anna, a junior at William Penn High School, was sitting in her living room doing her homework earlies in the evening. "I heard a sizzling sound, then an emergency signal. Then came the blast." The explosion blew in the front door of the D'Anna home, ripped down a screen door and shattered all the windows in the house.

With her in the house were her cold air blowing through the broken - mother, Rosalie D'Anna, and her grandmother, Elsie D'Anna, "My mother was hit on the head with the broken glass. She was taking a shower," said Roberta D'Anna.

Robert Arnold, 33, of Collins Park, was unloading propane tanks from a railroad car at the plant when he also heard the sounds that preceeded the explosion.

"I heard a hissing sound, and then

a bang, and a hiss and then I saw gas and heard the alarm. When you hear everything off, so I was running up the steps to shut the car off, when I

heard the explosion. Arnold was knocked down, but not seriously hurt. He was treated for smoke inhalation at St. Francis Hos-

Street, said she was half asleep on "It's a miracle," that his injuries her living room couch when the were so minor, Arnold said in an explosions broke every window in interview at the hospital. The face the front of her house. She had just: of his digital watch was scratched. · finished replacing one window her by flying debris, but he received no

Man and Bucky Robert Assold.

In Dobbinsville, his father, Lester ically swept the broken glass from Arnold, also was lucky. The blast broke, most of the windows in his place at 639 Clymer St., but Arnold next to such plants as Amoco and, was unburt. He seemed annoyed at the Getty refinery, "You just take it being ordered to leave his home. "The cops were swarming over the place," he said.

Carol McNulty, who lives still furington Park, was ready to leave for good. She had worried about living even a half mile from the plant. "I don't like it being back there."



Cots were set up last night at William Penn High School for people evacuated after the Amoco explosion.

Officials list explosion's casualties

by an Amocoepokacananus Charles F. Bohl of Rising Sun, Md., Richard B. Davis of New Castle and Joseph E. Tussey of Eismere, all process assistant operators; Thomas L. Freeland of Wilmington, a maintenance mechanic, and John J. Reynolds of Newark, a shift superinten-

No ages were immediately avail-

Four men were dead on arrival atthe Delaware Division of the Wilmington Medical Center last night, but only Reynolds could be identi-

The five men killed in last night's fied. The others were burned beyond explosion and fire at the Amoco recognition and will have to be iden-Chemicals Corp. plant south of New Lilied by the medical examiner, cofcablic affairs.

> Under New Castle County's disaster plan, a doctor on the scene sorted victims according to their injuries, sending the most seriously injured to the Delaware Division or Crozer-Chester Hospita in Upland, Pa. Riverside Hospital was put on alert, but received no patients.

In all, twenty-eight were reported

State police helicopters transported two men to Crozer-Chester last night. They are: George Arrington, 49, of New Castle, in critical

condition in the intensive care unit this morning, and Robert Duval Sr., 42, also of New Castle, in critical wespetition in the burn center.

Those admitted to the Belaware Division with burns and other: injuries, and listed in serious condition this morning, were William L. Lysinger Jr., 39, of New Castle, and Francis H. Chudzik, 42, Walter S. Mateja, 62, and John R. Shupe, 39, all of Wilmington.

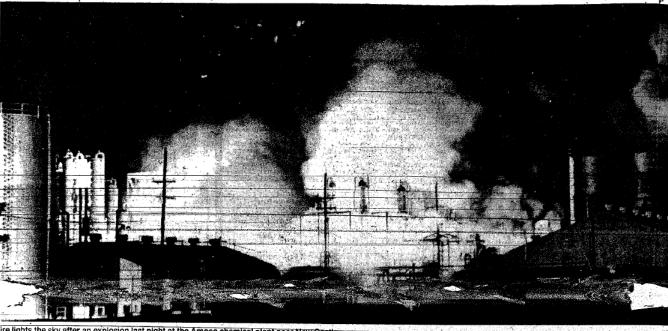
Also admitted to the Delaware Division, but in good condition this morning, were James A. Crossan, 29, and Lewis E. Lynch, 33, both of New Castle; Michael Lucas, 39, Smyrna; Elmer S. Lynch, 56, and Zoll C. Collins, 41, both of Newark;

Charles K. Wakeling, 40, Wilding ton; Jerry Parker, 31, Dover, at Earl G. Swanson, 37, Millingto

Treated and solution of from the Delaware Division were Gerald Hope, Alton Drummond, Counte Smith, Robert Grady, Rick Austin Bill Karia and Rudoiph Kellar Austi and addresses were mayarlable.

Treated and released from Se Francis Hospital in Wilmischen, were Clifton Clark, 35, Painfield Acres; Daniel Covelli 2, Carlo Park; Douglas Lea; 32, Delawitz-City, William Jordan, 42, New Clies tle; Robert Arnold, 33, Colline Past and Ronald Delsordo and Jose Gonzon, for whom ages and addresses were unavailable

Champagne drowns years of disappointment



Fire lights the sky after an explosion last night at the Amoco chemical plant near New Castle.

Explosion's damage extended for mil

The dead, police said, were found in the immediate area of the blast. The early count of six dead once rose to seven and then was finally revised to five

Early today, Kent Carson, the plant's employee relations manager, said that until last night the plant had operated for more than 900 days without having an injury that forced a worker off the job.

Delaware 9 from Dobbinsville, on the north, to Federal Lane will probably be closed all day state said police said. While the fire raged last night, portions of U.S. 13 and Delaware 273 within a mile of the plant were shut for more than an hour.

About 600 residents of Dobbinsville, Shawtown and Washington Park were evacuated shortly after the explosion because officials were worried about secondary explos. Many of the evacuees were taken to the nearby William Penn High School and George Read Mid-dle School, but all had returned to eir homes by about 7 this morn-

also evacuated was the U.S. Postal Service mail-sorting building at Hares Corner. Wilmington Stmaster Edward A. Biegel said 200 workers were ordered out of the early tonight and that deliveries should be back to normal tomor-

State police said the explosion may have occurred in a propylene tank in processing area of the plant. However, a worker said the explosion occurred in a reactor in which propylene, a highly flammable gas, is mixed with other chemicals to make polypropylene pellets.

No toxic fumes from chemicals at the scene were released, police

At the Delaware Division, Robert Arnold said he and his fellow workers considered him one of the luckiest men alive because he was unloading chemical tanks in a building less than 100 yards from the

Arnold, a small thin man, said he heard a whistling sound and then an alarm went off. I went up top and was ready to shut it off when I was blown off the platform. I got up and went to put the sprinkler system on.
I rounded the bend, walked out the door and that was it," he said as he threw his hands up in the air.

Arnold was taken to St. Francis Hospital, and when he was released a few hours later, he went right to the Delaware Division to find out

scarcewill belighter than usual. Ble - manufact shift who had brought relatively a catustrophe, gel-said his night shift will come in tives of the injured mento the hospi. James 20 tives of the injured ment of the hospi. Tarmes 3D Leary, an Amoco the explosion and the blast trocked among the injured.

"And you were right in there?" asked one. "It's a miracle you're still here. And you walked away?"

"I know. I know," he sighed and then walked off to find out about the ones who weren't as lucky as he

Ruth Lynch, sister of Lewis Lynch, one of the injured workers, had just visited her brother and was sitting outside the busy hospital last light almost in a daze.

"He said he was going on break when it happened. He and another worker were in the canteen. He said new him up to the ceiling, right out of his boots . . . They crawled out to the highway and met a lot of other workers who didn't know what happened, but were just trying to get

Miss Lynch said her brother "told me when it went off the air was burning hot. He said he didn't see anything. He felt tremendous heat and then saw a lot of debris falling all around him. That's how he injured his arm, something fell on

building at 9.30 p.m., until about about his co-workers. At the emeration of the horizontal forms today throughout Detagraph of Amoco employees from gatton into the cause of the 10th St. in Wilmington said he was in an explosion, hurring huge churcks.

away from a meeting in Houston. Texas, last night, said, "It's going to be several days before anyone's got

anything pieced together." The fire was visible for miles. and other fires broke out in the marsh grass around the plant.

Two state police helicopters tran-sported the injured to nearby hospitals. One crew airlifted injured workers to the burn center at Crozer-Chester Medical Center in Upland, Pa., and returned with burnspecialists from the hospital. A triage unit - where the initial, it happened so quick. They went emergency diagnosis of the through a door to get their fire seriously injured patients is made coats. When they opened the door, it — was set up at Crown Zellerbach Corp. on Delaware 9, near Amoco.

The explosion rocked buildings as far north as Hockessin, and shook the ground in Salem County, N.J. across the Delaware River. Motorists in Pennsville, N.J., parked their cars along the river to watch the black smoke rolling northeast from across the river.

A large plate glass window, worth about \$800, was blown out of the Z Mart store on Maryland Avenue in Richardson Park, about six miles away, said Bill Bucci, the store's

Amoco employs about 300 people, with about 260 working days at the plant. The day workers reported to work this morning and many would be assigned clean-up duties. O'Leary said.

Officials said the polypropelene resin manufactured at the plant is used in plastic products for autos.

tousing, tires and appliances.

Cpl. Barry Beck, a state police spokesman, said the fire started in the processing area of the plant and spread to the finishing building. From there, spot fires ignited by hetfragments of metal were propeiled into the outlying marsh between the plant and the community of Dob-

Employee Arnold claimed the explosion occurred near a propylene tank, inside a high-pressure mical reactor in pellets are made.

At 10 p.m., Beck said, the concern seemed to be six large propylene storage tanks threatened by heat. What they must do is cool these tanks down, he said, "plus there are several tank cars on the [railroad] spur [around the plant]." Beck estimated the size of the tanks at 50,000 cubic feet.

By 11:30 p.m., firefighters said the chance of another explosion was

Detective Gerald Montgomery said the explosion occurred a moment after an alarm at the plant sounded. "No sooner did the alarm go off when the explosion occurred, he said. Montgomery said the tanks

of propylene are "like bombs." Police, fire marshals and agents of the U.S. Bureau of Alcoho Tobacco and Firearms were conducting investigations. A 20-member ATF "national response team" was being assembled from through out the nation and would be on th scene today, a fire official said. J. Benjamin Roy, state fire marshal, was heading the state investigation

Fire officials today said they had no reason to suspect arson.

Contributors

Staff reporters Harry Adams, M. Roy Adams, Buzzy Albert, Sandy Dennison, Jerry Hager, Jane Harriman, Peter Harris, Nancy Kesler, James McBride, Phil Milford, David L. Preston, Richard Sandra and Steve Marshall contributed to the stories on the explosion at the Anioco plant.

I never really thought it would happen," said Carol Davis, "but whenever there would be a noise, it would be the first thing I would think about.".

Mrs. Davis, whose husband, Richard, was one of five men killed in Tuesday's explosion and fire at the Amoco Chemicals Corp. plant south of New Castle, was talking about the fear she and other wives of those killed in the blast felt for their husbands on the job.

Davis, 41, was born in Philadelphia and had worked at the Amoco plant for 10 years as a process assistant operator.

Mrs. Davis was inside their home at 102 E. Lunenberg Drive, Jefferson Farms, just after 6:30 Tuesday night, when she heard what she thought might be thunder.

"I went out to call my little girl," she said. "Then I saw the big smoke.

She said she gathered her three daughters, Dawn E., 15, Karen L., 13, and Laura A., 9, and went to a neighbor's home.

We listened

Adri Bohl, the wife of Charles F. "Chuck" Bohl, said she had always been aware of the danger her husband (aced in his job as an assistant operator at Amoco.

"Any time there are reactors and propane gas involved, there is danger," she said, "but you never think

Bohl, 46, of Octoraro Lake, Rising Sun, Md., worked at Amoco for 101/2. years. Like Davis, he grew up in Philadelphia. The two attended Lincoln High School there, but their wives said they had never men-

tioned knowing each other.

Bohl attended art classes at the Philadelphia Museum of Art after high school, Mrs. Bohl said, and he enjoyed painting and doing artwork for their son, 11, and daughter, 8.

"He liked to make sculptured Halloween masks for the children," she said "He was in the middle of making one for my son."

Relatives and friends gathered around the families of the men yesterday, offering comfort and sup-

At the home of Thomas Lee Joseph Freeland, 42, of 2202 Grace Road: Hillendale, near Claymont, the visitors tried to console Freewife, Rose Ann, and children,

and Joseph, 14.

Freeland, who grew up on Green

Street in Claymont, graduated from Claymont High School in 1958. He worked as a maintenance mechanic

John J. Reynolds, 55, of 212 Spruce Glen Drive, Meadowood, had worked for 19 years at Amoco as a shift operator. Kevin Reynolds, one of five grown sons of Reynolds and his wife, Mary, said his father was a "private person" who had "a few close friends and a tight-knit fam-

An Amoco employee who had worked with Reynolds, and sailed boats with him said, "You couldn't

ask for a nicer guy."

Born in Elizabeth, N.J., Reynolds served in the Navy in World War II, his son said

Joseph E. Tussey, 60, of 115 Olga Road, Elsmere, worked as a catylist operator at Amoco for 19 years. He and his wife, the former Anna May Harrity, were "very close," according to Mrs. Tussey's sister, Catherine Johnson. "He was one wonderful person," Mrs. Johnson-said. "He was a thoughtful, good family man, very close to his wife and his brothers and sister.

Tussey grew up on Wilmington's east side. He attended Wilmington High School and served in the infantry in World War II. He was dis-

The couple had no children. Besides his wife, he is survived by two brothers, Raymond S. and William D., and a sister, Mary Tussey Craner, all of Wilmington.

Window repairs start after Amoco disaster

A New Castle city official has authorized a contractor to

For now, the money will come from federal block grant funds that had already been allocated for general home repairs in Dobbinsville, according to Michael J. Gallagher, community development coordinator for New Castle.

But Gallagher said he would ask the City Council to seek reimbursement from Amoco.

Gallagher said windows in about 40 of the 90 homes in Dobbinsville were broken. Windows were also broken in three Washington Park homes, but those residents will have to arrange for the repairs themselves because that area is not included in the grant, he said.

Gallagher said he did not notice any structural damage to the homes in Dobbinsville, a neighborhood of aging rowhouses.

Union cites staff cutback

Continued from A1

any comment would be "pure speculation.

Pavey said Amoco did not know whether a maintenance crew was at work on the gas pipe at the time of the explosion.

The fire, which began after the 6:31 p.m. blast, was brought under control by about 200 firefighters at 5:41 yesterday morning. By 7, nearly all of the 600 residents who had been evacuated were returning to their homes.

State Fire Marshal J. Benjamin Roy Jr. said pipes containing flammable gases were broken in the explosion. The gases - hexane, propane and propylene - "just helped to fuel or feed the fire," he said. At 7 last night, polypropylene pellets still were smoldering, he said.

Eleven of the state's 15 deputy fire marshals and 12 investigators from the East Coast offices of the U.S. Treasury Department's Bureau of Alcohol, Tobacco & Firearms were on the case, Roy said. Representatives of the U.S. Occupational Safety & Health Adminstration (OSHA) were also at the plant.

The plant manufactures polypropylene resin for use in plastic prodappliances.

said company officials recently had decided to spend about \$10.6 million to modernize the plant, located on River Road south of New Castle. That money could go towards repairing the plant, he said...

Ruscilli said most of the damage occurred in the finishing operations, where powdered material is con-

verted into plastic pellets.

The blast also damaged the water cooling system, and the plant is without the water it needs to complete any work in the polypropylene manufacturing process.

Dale Casseday, president of Local 8-732 of the Oil, Chemical and Atomic Workers Union, which represents workers at the plant, said yesterday he warned the company two years ago of possible safety problems because of understaffing.

"I wrote to Mr. [John | Swearingen, chairman of the board of Amoco Chemicals' parent company, Standard Oil of Indiana and advised him that the very thing that happened could occur because they were undermanning the plant," Casseday said. He said his letter warned that employee cutbacks could lead to an explosion. He wrote the letter, he said, after the company reduced employees from about 220 to 180.

Pavey said the company had no record of such a letter, and he expressed doubt that it had been written. Company records do show, however, that Casseday filed a grievance in April 1978, protesting cuts that had been made in man-

In his complaint, Casseday ucts for cars, homes and warned that the employee reductions in the processing and finishing Plant manager Albert(E. Ruscilli operations could "increase the danger of a plant explosion," Pavey said. He refused to let a reporter read the company documents relating to the grievance.

After a series of meetings with Ruscilli, Casseday signed papers on Dec. 15, 1978, stating that he accepted the employee levels. Pavey said. If Casseday had been

unhappy with the arrangement, he should have taken the issue to an arbitrator, Pavey added.

State police said a figure of six or seven dead was given out at first based on inaccurate information that victims taken to the Crozer-Chester Medical Center in Upland Pa.. had died.

According to preliminary reports most of the five dead men had been working in the cinder block control room - the nerve center of the polypropylene operation.

One of the victims, Joseph E. Tus sey, a process assistant operator who lived at 115 Olga Road, Else mere, was working overtime, co workers said. Tussey normally worked on the day shift, with abou 260 others, "Why he was working overtime, I don't know," a co worker said.

...The other dead men, in addition to Tussey and Freeland, were identi fied by Amoco as:

Charles F. Bohl, 46, Octorar Lake, Rising Sun, Md., and Richard B. Davis, 41, of 102 E. Lunenber Drive, Jefferson Farms, both pro cess assistant operators, and John . Reynolds, 55, of 212/Spruce Gle Drive, Meadowood, a shift superir

Twenty-eight were reporte injured, with two at the Crozer Chester Medical Center: Georg Arrington, 49, of New Castle, wh was in serious condition in the inter sive care unit last night, and Rober Duval Sr., 42, also of New Castle, i critical condition in the burn cer

Reporter Marta McCave also con tributed to this story.

Faulty valve cited in Amoco blast

Gas cloud enveloped 2-man crew and ignited before they could flee

By Joe Trento and Gail MarksJarvis

Staff writers

Investigators say a faulty valve caused the gas leak that led to Tuesday night's fatal explosion at the Amoco Chemicals Corp. plant near New Castle.

Five workers were killed and 28

injured in the blast.

State Fire Marshal J. Benjamin Roy Jr. said yesterday that the devastating blast occurred after the valve sprung a high-pressure leak. Roy said a gas cloud made up of an explosive combination of propylene, hexane and propane engulfed a nearby two-man maintenance crew and ignited before they could escape.

The two men, Thomas L. Freeland and John R. Shoupe, are believed to have been working on the valve or a connecting pipeline at the time of the leak. Freeland, 42. was killed and Shoupe, 39, was still listed in serious condition today in the intensive care unit at Delaware

Div Jon.

he explosion at the plant on Fiver Road blew out windows in a

le area and the shock wave could

be felt for miles

Union officials and investigators WE trying yesterday to find out

Over 200 file claims

Amoco Chemicals Corp. has hired a claims adjustment firm to handle damage claims resulting from the explosion Tuesday at its New Castle plastics plant.

The firm. GAB Business Services Inc. of Newport, received "a little over 200 claims" in its first 24 hours on the job, manager

Richard Litchford said yesterday.

Anyone with a problem or complaint can call the firm at

999-0176. Litchford said.

The explosion shattered many windows in Dobbinsville, south of New Castle, and elsewhere. A New Castle city official authorized a local contractor to begin repairs in Dobbinsville with federal block grant money. New Castle City Councilman David Burroughs said yesterday that GAB will be billed for the Dobbinsville work. Others with damage claims should contact GAB directly, he said.

whether gas should have been blocked off from the line before the maintenance work started.

Employees familiar with maintenance procedures at the plant say gas lines normally are blocked off and purged of dangerous gases before maintenance work is done:

The procedure is considered a routine precaution required before a company safety permit can be issued, the employees said. Company policy requires that a safety

permit approved by a supervisor be issued before any maintenance work can begin, they said.

Amoco spokesman Paul Pavev refused to release any information concerning the safety permits or work orders covering maintenance done by Freeland and Shoupe.

Roy's investigators don't know what set off the gas cloud, saving it could have been a spark caused by a dropped tool or a cigarette.

"We may never know what set the fire off," he said.

Gas was supposed to be detected by an elaborate system of electronic and mechanical "sniffer" alarms. Roy said either no such automatic system existed or it failed completely Tuesday night.

Roy and other investigators are also trying to determine why the plant's water fire-suppression system was made useless by the blast. forcing firefighters to bring water in from the outside

As the task force of local, state, tederal and company investigators poked through the rubble vesterday, company employees said Tuesday's explosion was not the first incident of its kind at the plant.

Michael Joswick, who has worked at the plant since 1967, said he was present during two incidents where high-pressure leaks developed at the plant, which makes polypropy-

lene, a plastic.

Joswick said the first leak in the fall of 1967 - when the plant was owned by Avisun Co. - required that a worker climb to the top of one of the reactor vessels where chemicals are mixed to install a wooden plug to stop a high-pressure leak.

See NO RECORDS - A10, col. 1

the single of the same of the same of the

Marcello ('Mike') DiAllesandro worked at Amoco the day of the explosion. He was worried about other tanks exploding.



Youtube video

Born in 1943, came to New Castle via Canada in 1961 and immediately went to work at Amoco. The plant took oil byproducts from Sunoco to produce polypropylene pellets for pellets etc. Among his jobs was working inside reactors chipping product off beaters.

Industry becomes the Major Employment in New Castle

Shipping	>1664 >1682	English Took Over; Ships by law went first to NY Penn Arrived; Commerce on the river went to PHL
Law	>1777 1880	British Invasion; General Assembly -> Dover State Courts, county offices -> Wilmington

Transportation

```
NC was a transit hub since c1800 for Boston->NY -> PHL -> NC -> Baltimore -> DC NC & FT Turnpike Co. (Competition: C&D Canal 1829)

NC & FT RR 1832 (Bypassed by PHL, Wilm. & Baltimore RR 1839)
```

Industries came and went: manufacturers of railroad engines, iron pipe, anchors, hardened steel for railroad switches and brakes, cotton and woolen fibers and cloth, flour mill, illuminating gas, gloves, shirts, umbrellas, artillery shells, rayon fabric, vulcanized fiber, bulk polypropelene for bottles etc. AN INDUSTRIAL TOWN!! They brought people and jobs. When the jobs disappeared, so did the people. Limited lifetime of companies same as today.

Shopping area

NC stores served the town and surrounding area (less over time) and employed locals.

The Trolley came in 1896, a two edged sword: people could come, but they could go
Workers and shoppers could commute to Wilmington. Cars continued the trend.