

### A LONG LEVEE ASKED

To Protect Titusville From a Recurrence of the June Flood.

### ESTIMATES OF AN ENGINEER.

He Thinks Only \$45,000 Would Cover the Cost Very Easily.

### THE PLANS FOR THE PROPOSED WORK

(SPECIAL TELEGRAM TO THE DISPATCH.)

HARRISBURG, July 7.—A committee consisting of Roger Sherman, John L. McKinney, W. H. Andrews, Mayor E. O. Emerson and City Engineer Joseph Smith, all of Titusville, waited on the Governor today and presented him the following memorial prepared by Mr. Smith for the committee:

To the Citizens' Relief Committee of the City of Titusville: GENTLEMEN—Agreeably to your request, I herewith submit plan of that portion of Titusville inundated by the flood of June 5, 1892, showing the location of the industries destroyed by fire and damaged by flood, and the changes made in the channel of Oil Creek. Also this report embodying my suggestions as to the cause and the work necessary to prevent serious damage in the event of a future recurrence of similar natural causes.

The valley of Oil Creek above Titusville narrows in its water shed the townships of Bloomfield, Sparta, Rome, Oil Creek and parts of Athens and Stark an area of about 180 square miles. The area is fan-shaped, being about 15 miles wide at the northern part, converging to 7 miles at the southern.

The principal branches of Oil Creek are the western branch, having its main head in Lake Canadota, a natural lake of about 200 acres in area, in Bloomfield township, 16 miles from Titusville, and the eastern branch, rising in Sparta township, 19 miles from Titusville, where is constructed a dam, forming an artificial lake of about 40 acres. The heights of these two points above tide are given. Lake Canadota, 1412 feet, and Spartansburg, 1387 feet, 25 feet above, respectively above Titusville. The streams from these lakes unite at Centerville, ten miles from Titusville, and form the principal tributaries. On all these streams are several dams for mills, but none of them form reservoirs of extended area.

Through Titusville the creek flows in a southeasterly direction, with an average fall of 14 feet per mile. The channel of the creek is mostly a flat, and the water when the rain is falling, the ordinary channel being about 100 feet wide, and from seven to eight feet deep. On the north side of the channel is a broad level flat, averaging about one-fourth of a mile in width, beyond which is another rise of about 10 to 12 feet, to another wide plateau, on which the business streets and residences are constructed. On the lower flats are the railroads, and most of the refineries are refining plants, with quite a number of houses occupied by persons in moderate circumstances. After flowing nearly the length of the city Oil Creek makes a sharp turn to the south, receiving Pine Creek and flowing through a constructed valley.

The Flood of Last Month. On the afternoon of June 4, 1892, a severe electrical storm and rain took place in Titusville and north, being especially severe across the broad part of the water shed in the townships of Bloomfield and Sparta, sufficient to raise the surface of the water in Lake Canadota and the artificial lake at Spartansburg four feet in six hours; this in addition to the water that ran away when the rain was falling. Observers in the vicinity of these parts say that open vessels situated where the wind received the actual rainfall collected from 8 to 11 inches of water in that time. Allowing but 8 inches as the average rainfall and 125 square miles as the area on which it fell, we have 2,325,000 cubic feet of water deposited on the water shed in six hours which must be taken care of.

Buildings Obstruct the Flow. To go back to Titusville: A cross section of the stream taken down Washington street from high water mark, shows a sectional area of 6,965 square feet. The current here was obstructed by buildings and was probably not a fair average. A cross section taken at the Emery farm, one mile above Titusville, where there was nothing to obstruct the flow, shows a sectional area of 4,655 square feet.

Oil Creek was overflowing her banks about 24 hours. If that body of over two billions of cubic feet of water passed down in that time, then 86,800,000 cubic feet must have passed each hour, or the speed of the current must have averaged 3.10 miles per hour. Some parts were comparatively still water, and the deeper parts must have exceeded five miles per hour. The height of the extreme height it must have been greater.

Not Caused by a Dam Giving Way. It has been reported that the disastrous flood was caused by the giving way of the Spartansburg dam, and the dam at the outlet of Lake Canadota, but as the evidence shows that but a small portion of the dam at Spartansburg gave way, and that the water was pouring over the top of the dam about one foot deep on the morning of June 5, and the dam at Canadota did not give way until after the extreme high water at Titusville had passed, it would seem that the extreme rise in the creek cannot be attributed to these causes, but rather that they detained the water and prevented it from reaching a higher point.

In Titusville the water flooded the whole lower flat as shown on the accompanying map. On this flat are the tracks and stations of the Western New York and Pennsylvania and Dunkirk, Allegheny Valley and Pittsburgh Railroads, nine oil refineries, one large tannery, furniture factory, radiator works, cover shop and 41 houses, causing the loss of 60 lives.

Work of the Flood Alone. Aside from the fire the flood carried entirely away nine houses and seriously damaged 10 others, caused damage to many factories, stores, etc., to a large amount. It cut into the high bank on the south side of the creek, completely carrying away one street and depositing the gravel from the bank into the channel below, and the entire channel of the creek, so that it now passes through the center of the lot formerly of the Crescent Oil Works. It also raised the bed of the channel to where the banks were before, thus endangering other property along the banks.

It is reported that the flood carried away the former point of discharge, and the creek bed being higher, the additional flow of water caused back water in the run for about 300 feet, raising a sluggish stream where before was a rapid current.

Temporary Relief Being Granted. Church run is the outlet of the entire sewerage system of the city, and the change is of such a nature as to cause a deposit of the sewage in the bed of the run, seriously threatening the health of the city. So important is this matter that the Relief Committee, at the suggestion of the Board of Health, are now expending about \$200 to temporarily turn Oil Creek above the mouth of the run to relieve the danger for the present.

It seems necessary to protect this territory from future devastating floods if possible. As has been said, it includes the railroad tracks and nearly all the manufacturing; no other place in the city will accommodate the water. It is also raised the bed of the channel to where the banks were before, thus endangering other property along the banks.

A Long Levee Is Wanted. To protect this district will require about 10,000 feet of levee of varying height. From the water works, above the upper end of the city, to the dam at the entrance of the mill race, the banks are comparatively high and will require but a low dyke. From the dam to Franklin street they are lower, while from Franklin street to the junction of Church run they are very low. I do not think it practicable to build them high enough to entirely protect the city from such a flood as that of June 4, as that would require a channel 200 feet deep, and 25 feet deep. But a lower, well-constructed levee will confine the water to the channel in ordinary floods, and in one like the last will do but little damage.

For the levee I recommend the driving of piles eight feet apart, then planking the

side toward the stream, supporting this with gravel and sand on the back and with stone trip-rap on the front.

Plans for the Necessary Work. This levee to be set back from the bank a sufficient distance to leave a space of 500 feet from the opposite bank, the earth and stone to form the levee to be taken from the creek side of the levee. I recommend the construction of levee from water works to mill dam 3,000 feet, 5 feet high; from mill dam to Franklin street 4,500 feet, 5 feet high; from Franklin street to mouth of Church run 3,000 feet, 7 feet high.

I approximately estimate the cost as follows: 3,000 feet levee, 5 feet high..... \$1,125 4,500 feet levee, 5 feet high..... 1,575 3,000 feet levee, 7 feet high..... 1,800 Clearing old channel of creek..... 2,000 1,000 lineal feet revetment to secure south high bank against further encroachment..... 2,500 Incidental expenses..... 4,000 Total estimate cost..... \$14,000

Protection From the Mill Race. To insure protection from the mill race—on the non-observance of the rights from Jonathan Titus these words appear—"the parties of the second part agree with the parties of the first part, and as a consideration for the above, that they will so construct the said race that the water shall at all times be kept within the boundaries." I think the owners of the race will see that no damage be caused by water escaping from the race, as they will be responsible for such damage.

Respectfully submitted, JOSEPH SMITH, City Civil Engineer, TITUSVILLE, Pa., June 28.

### CRUELTY TO A LITTLE GIRL.

Her Adopters Charged With Treating Her in a Shameful Manner. Agent O'Brien, of the Humane Society, returned yesterday from Westmoreland county where he investigated a case of cruelty to an orphan child. On Tuesday he was summoned to Apollo, Armstrong county, where he found great evidence over the abuse of a girl, Ida Steele, aged 15 years. She had for several days been under the protection of a Welshman named Kays, who, it is alleged, had rescued her from the house of Edward and Margaret Smith. The child had been terribly abused as was evidenced by numerous cuts on her body, a large scalp wound on her head, the laceration of each of her arms and a deep red mark about her neck.

Her story was simple. She said she is an orphan, and four years ago was given into the custody of a man by the authorities of the Home for the Friendless. She could not recall who her custodian was, but shortly after being with him Edward Smith and his wife secured her. From the time she entered their home, she said, she had been abused. Only a few days ago, she said, she was tied in the stable, a chain being fastened about her neck. Mr. O'Brien, who investigated the case, made information before Squire Corcoran, of Apollo, charging Edward Smith and his wife with wantonly and cruelly abusing the girl. A hearing was set for to-day. Smith denied abusing the girl, but said his wife was not right in her head and not responsible.

Remnant day-to-day—Odd lace, silk and chenille curtains. All must go. BOOTS & SHOES.

### THE FOURTH'S EXPENSES COVERED.

Additional Amounts Swell the Total Subscription to \$6,450. Mayor Gourley yesterday received as additional subscriptions to the Fourth of July fund \$35 from John Wiant, being 20 per cent of the money he was on a merry-go-round. The Mayor also received \$10 from the Great Western Band which had been over-paid, the band having had only 29 instead of 30 pieces. The total amount of the fund is \$6,450, which is thought to be enough to cover all expenses.

### DR. PRICE'S DELICIOUS Flavoring Extracts

NATURAL FRUIT FLAVORS. Vanilla Of perfect purity. Lemon Of great strength. Orange Economy in their use. Almond Flavor as delicately and deliciously as the fresh fruit. Rose etc. For sale by Geo. K. Stevenson & Co., and all first-class grocers.

### GOING OUT CAMPING?

Pic-nicing, fishing or hunting? If so, you will not fail to appreciate the advantage of taking along a supply of the GAIL BORDEN "EAGLE" BRAND Condensed Milk. It is most delicious in coffee, tea, chocolate and numerous summer drinks. For 30 years the leading brand.



Your Grocer and Druggist sell it. For tea, coffee and chocolate use undiluted. It's better than cream.

### NEW ADVERTISEMENTS.

### A DEEP CUT IN SILKS.

All our 65c and 75c figured INDIA SILKS at 41 cents.

All our \$1 figured Indias and Changeable Silks at 50 cents.

All our \$1.25 and \$1.50 qualities at 75 cents.

DURING THIS SALE NO SAMPLES WILL BE GIVEN.



435 Market St. 437

### NEW ADVERTISEMENTS.



### "TICKLED TO DEATH"

With my stud. I wouldn't sell it for double what I paid for it. I never knew what ARONS meant by VOLTAIC DIAMONDS. Until I bought mine. That's what they all say. We have them in RINGS, PINS, STUDS, EARRINGS, BROOCHES, etc. Special guarantee. My illustrated catalogue mailed free.

B. E. ARONS, Jeweler, Proprietor Voltaic Diamonds, 65 Fifth Ave. 178-179

### CARPETS, WALL PAPER.

Wilton Carpets, Axminster Carpets, Velvet Carpets, Body Brussels Carpets, Tapestry Carpets, And all kinds of Ingrain Carpets. Everything new in style, choice in color. All at

### SPECIAL LOW PRICES.

Wall Paper in every quality and style for wall and ceiling. Special styles in choice colors. You should see our stock before you buy.

### GEO. W. SNAMAN,

136 FEDERAL ST., ALLEGHENY CITY, PA.

### Joy and Satisfaction.



### "JAMES COOK"

HE has been to our establishment, and is certainly one who has become our warm friend. WHO could help feeling as he does in one of our Home-made Worsteds Suits for \$15.

LAUGHS—You can't blame him. He saved a good \$5 bill, and he has a right to congratulate himself.

LAST, but not least, he holds one of our printed guarantees, which insures the wearing quality of his suit for one year. He

LAUGHS because he is hard on clothes and thinks we'll have a job keeping it in repair for him; but he don't know our clothing as well as we do—BEST work, perfect fit, lowest prices have made us what we are: "The acknowledged clothiers of the town."

### JACKSONS

954 and 956 Liberty Street.

### CHESSMAN'S \$1.00 SPECTACLES

Are recommended by all who have tried them.



CHESSMAN OPTICAL COMPANY, 43 Federal Street Allegheny, Pa.

UNITARIAN PUBLICATIONS FREE Address Mrs. Mary Lyman, 19 Oakland Square, Pittsburgh.

PATENTS. D. O. LEVIE (next Leader 111 Fifth av., Pittsburgh, Pa. 20 years collector

### NEW ADVERTISEMENTS.

### KAUFMANN'S

### Great Cut of Prices.

While Every Garment and Article has been Reduced, the mention of the following will suffice to convince purchasers of the great saving in money in store for them:

### STRAW HATS.

FOR NEXT TO NOTHING. We don't want a single straw hat in our house after July, and we won't, if big reductions will make you buy them. 25c Will take any one from a large lot of regular 50c and 75c Straw Hats. 50c Will take any one from a large lot of \$1 and \$1.25 Straw Hats.

### SUMMER UNDERWEAR.

Our entire stock of Men's Thin Underwear, consisting of the best and choicest domestic and imported grades, will be sacrificed at about 50c on the dollar. We are determined not to carry anything over; hence we have cut and slashed and slaughtered prices in a manner that is bound to move our stock speedily.

### BOYS' CLOTHING.

The following matchless values will be found on our counters to-morrow: \$1.65 For all wool Sailor Suits, pleated and embroidered; fully worth \$3.00. \$1.49 For choice from a lot of good single and double breasted Short-Pant Suits—odds and ends and broken sizes—worth double and treble what we ask for them. \$2.50 For beautiful blue, brown and gray Kilt Suits, artistically embroidered, and of very nobly and stylish designs; really worth \$4.00.

### LADIES' SHOES!

For fine glazed Dongola or French Kid, hand-turned Oxford Ties; worth \$1.75. 98c For fine tan goat Oxford Ties, hand turned; worth \$2. \$1.00 For the celebrated Amazon Kid Shoes, warranted solid throughout; worth \$2.

### MEN'S SHOES!

For solid leather (not leatherette) Lace or Congress Shoes; worth \$2. For finest tan, goat and Russian leather Huchner or Picadilly style shoes; worth \$4.

### KAUFMANN'S

### FIFTH AVENUE AND SMITHFIELD STREET.

### KEECH.

We offer this week a line of Corner Chairs, Mahogany Finish, Upholstered in Silk Tapestry, various colors. These chairs were made to sell for \$12 to \$14, but we offer them at the small sum of

\$7.75.

Every housekeeper who has a vacant corner should secure one.

### KEECH,

928, 925 AND 927 PENN AVENUE.

### THIS INK IS MANUFACTURED BY J. HARPER BONNELL CO., NEW YORK.

### "WELL BRED, SOON WED." GIRLS WHO USE SAPOLIO

ARE QUICKLY MARRIED. TRY IT IN YOUR NEXT HOUSE-CLEANING.

### WALL PAPER.

Do you want to buy wall paper? If you do this is a splendid time. We have marked down everything, including Picture Mountings and Linocut Wall Paper. We will have some paper in the 100 list that never was sold in Pittsburgh for less than 8c. We have picture mountings at 5c per foot that recently sold for 10c. Our Fine Paints and White Lead and Oil at lowest wholesale prices. Send for price list of paints. We have the best paper-hangers only, and can furnish any number as once. We send them out of town at regular prices as our charge added. Send for samples of wall paper, sent free on any address.

### G. G. O'BRIEN'S

Paint and Wall Paper Store, 282 Fifth av., 3 Squares from Court House

### NEW ADVERTISEMENTS.

### KAUFMANN'S

### Great Cut of Prices.

While Every Garment and Article has been Reduced, the mention of the following will suffice to convince purchasers of the great saving in money in store for them:

### STRAW HATS.

FOR NEXT TO NOTHING. We don't want a single straw hat in our house after July, and we won't, if big reductions will make you buy them. 25c Will take any one from a large lot of regular 50c and 75c Straw Hats. 50c Will take any one from a large lot of \$1 and \$1.25 Straw Hats.

### SUMMER UNDERWEAR.

Our entire stock of Men's Thin Underwear, consisting of the best and choicest domestic and imported grades, will be sacrificed at about 50c on the dollar. We are determined not to carry anything over; hence we have cut and slashed and slaughtered prices in a manner that is bound to move our stock speedily.

### BOYS' CLOTHING.

The following matchless values will be found on our counters to-morrow: \$1.65 For all wool Sailor Suits, pleated and embroidered; fully worth \$3.00. \$1.49 For choice from a lot of good single and double breasted Short-Pant Suits—odds and ends and broken sizes—worth double and treble what we ask for them. \$2.50 For beautiful blue, brown and gray Kilt Suits, artistically embroidered, and of very nobly and stylish designs; really worth \$4.00.

### LADIES' SHOES!

For fine glazed Dongola or French Kid, hand-turned Oxford Ties; worth \$1.75. 98c For fine tan goat Oxford Ties, hand turned; worth \$2. \$1.00 For the celebrated Amazon Kid Shoes, warranted solid throughout; worth \$2.

### MEN'S SHOES!

For solid leather (not leatherette) Lace or Congress Shoes; worth \$2. For finest tan, goat and Russian leather Huchner or Picadilly style shoes; worth \$4.

### KAUFMANN'S

### FIFTH AVENUE AND SMITHFIELD STREET.

### KEECH.

We offer this week a line of Corner Chairs, Mahogany Finish, Upholstered in Silk Tapestry, various colors. These chairs were made to sell for \$12 to \$14, but we offer them at the small sum of

\$7.75.

Every housekeeper who has a vacant corner should secure one.

### KEECH,

928, 925 AND 927 PENN AVENUE.

### THIS INK IS MANUFACTURED BY J. HARPER BONNELL CO., NEW YORK.

### "WELL BRED, SOON WED." GIRLS WHO USE SAPOLIO

ARE QUICKLY MARRIED. TRY IT IN YOUR NEXT HOUSE-CLEANING.

### WALL PAPER.

Do you want to buy wall paper? If you do this is a splendid time. We have marked down everything, including Picture Mountings and Linocut Wall Paper. We will have some paper in the 100 list that never was sold in Pittsburgh for less than 8c. We have picture mountings at 5c per foot that recently sold for 10c. Our Fine Paints and White Lead and Oil at lowest wholesale prices. Send for price list of paints. We have the best paper-hangers only, and can furnish any number as once. We send them out of town at regular prices as our charge added. Send for samples of wall paper, sent free on any address.

### G. G. O'BRIEN'S

Paint and Wall Paper Store, 282 Fifth av., 3 Squares from Court House

### DOUGLAS & MACKIE.

### PHENOMENAL CLEARING SALE,

COMMENCING THURSDAY, JULY 7.

No economical purchaser can afford to miss it. Cost cuts no figure now, so come at once if you want to save money. Read below and compare our prices to others offered elsewhere.

Every department overflowing with Bargains. We only quote a few of the thousands we have to offer.

### WASH DRESS GOODS.

Bedford Cords were 12 3/4c. Sale Price 7 1/2c. China Cloths were 12 3/4c. Sale Price 8 3/4c. Seersuckers were 8c. Sale Price 5 1/2c. Novelty Suitings were 12 3/4c. Sale Price 7 1/2c. Organdie Lawns were 15c. Sale Price 10c. Chevrons were 15c. Sale Price 9 3/4c. Fine Batistes were 18c. Sale Price 11 3/4c.

### WHITE GOODS.

Lawn Checks were 10c. Sale Price 6 1/2c. 45-inch Hemstitched Lawns were 25c. Sale Price 17c. 45-inch Embroidered Flouncings were 45c. Sale Price 19c. 45-inch Hemstitched Embroidered Flouncings were 50c. Sale Price 22c.

### LADIES' WAISTS.

Ladies' Calico Waists were 37 1/2c. Sale Price 25c. Ladies' Percalé Waists were 75c. Sale Price 48c. Ladies' Satine Waists were \$1. Sale Price 68c.

### LADIES' SUITS.

Ladies' Percalé Suits were \$1.75. Sale Price \$1.25. Ladies' Batiste Suits were \$3. Sale Price \$1.95. Ladies' All-Wool Cloth Blazer Suits were \$8.50. Sale Price \$6. Ladies' Imported Serge Suits, navy, tans and blacks, were \$12.50. Sale Price \$9.50.

### COLOR DRESS GOODS.

Chevron Suitings, 36 inches wide, were 31c. Sale Price 19c. Bedford Cords, 40 inches wide, were 30c. Sale Price 18c. All-Wool Cheviot Suitings, 36 inches wide, were 50c. Sale Price 25c. Fancy Striped Bedford Cords, 38 inches wide, were 45c. Sale Price 28c. French and Scotch Plaids, 40 inches wide, were \$1. Sale Price 48c. Genuine Scotch Suitings, 40 inches wide, were \$1.50. Sale Price 98c. French Bedford Cords, 46 inches wide, were \$1.50. Sale Price 98c.

### Black Dress Goods.

Black Grenadines, 36 inches wide, were 35c. Sale Price 19c. Black Henrietta, 46 inches wide, were 65c. Sale Price 44c. Black Henrietta, silk finish, 46 inches wide, were \$1. Sale Price 68c.

### SILKS.

India Silks, light and dark shades, were 75c. Sale Price 48c. Double Warp Surah Silks, all colors and black, were 75c. Sale Price 48c. Figured India Silks, light and dark grounds, were \$1. Sale Price 69c. Figured India Silks, beautiful designs, were \$1.25. Sale Price 73c. Faillie Dress Silks, all colors, were \$1. Sale Price 75c. Regent Dress Silks, all colors, were \$1. Sale Price 68c. Black Bengaline Silks, 24 inches wide, were \$1.50. Sale Price \$1.

### TABLE DAMASKS.

Cream Table Damasks, 60 inches wide, were 50c. Sale price 38c. Cream Table Damasks, 66 inches wide, were 62 1/2c. Sale price 47c. Bleached Table Damasks, 64 inches wide, were 85c. Sale price 68c. Bleached Table Damasks, 72 inches wide, were \$1.50. Sale price 95c.

### MUSLINS.

Unbleached Muslin, yard wide, was 5c. Sale price 3 1/2c. Langdon 76 and Lansdale Bleached Muslins, were 8 1/2c. Sale price 6 1/2c. 9 1/2 Unbleached Sheeting, was 20c. Sale price 12 1/2c.

### Quilts and Table Covers.

1 1/2 Crochet Quilts, were \$1. Sale price 75c. 1 2-4 Marseilles Quilts, were \$1.50. Sale price 98c. 6 1/2 Chenille Covers, with Chenille Fringe, were \$1.50. Sale price 98c.

### UNDERWEAR.

Ladies' Silk Embroidered Ribbed Vests, were 37 1/2c. Sale price 25c. Ladies' Cream Silk Ribbed Vests, were \$1.50. Sale price \$1. Men's Balbriggan Shirts and Drawers, were 50c. Sale price 35c. Men's Gray Shirts (no drawers), all sizes, were 50c. Sale price 28c.

### HOSIERY.

Ladies' Seamless Fast Black Hose, were 20c. Sale price 12 1/2c. Ladies' Fancy Striped Hose, were 15c. Sale price 10c.

### SPECIAL REDUCTIONS IN LADIES' AND MISSES' REEFERS, BLAZERS, CAPES AND PARASOLS.

### DOUGLAS & MACKIE,

151, 153, 155 FEDERAL ST., ALLEGHENY.