HOW TO MAKE A ROAD.

S

The Best Methods of Constructing and Keeping Highways in Order.

STATE COMMISSIONERS' VIEWS

Found to Differ Widely, Yet All Unanimously Agree That

THERE IS NEED OF A NEW SYSTEM.

Arguments Proving That Good Thoroughtares Are Cheapest in the End.

THE DISPATCH presents the views of the State Road Commissioners on the subject of improving the public highways. The condition of the county thoroughfares this winter has made it evident to all that there is urgent need of some new system of road building.

People who live in cities and large towns frequently complain, and not without reason, of the inconvenience and annoyance occasioned by muddy streets. The abundance McCullough, of Allegheny; Faulkner, of of rain, together with the extraordinary mildness of the weather, has made such complaints doubly numerous during the present winter. But if the residents of cit-ies wax wrathful over a few inches of mud, here may be contracted and the such of the Allegheavy Valley Railroad, Pittsburg; Jacob Bollard, Conneautville; Cyrus Gordon, Clearfield; H. P. Goodwin, South Bethlehem, and Samuel R. Downing, how much greater cause for fault-finding have the inhabitants of the country districts, the following letter was sent by THE where the depth of the mire, if measurable DISPATCH: 'at all, is reckoned by feet and fathoms, rather than by inches.

It would be difficult to calculate the loss)that farmers, teamsters, country merchants and others in the vicinity of Pittsburg have suffered during the past few months, on account of the almost impassable condition of the public highways. In some localities business has been almost at a standstill. Scarcely anything has been hauled to market because the cost of getting it there would be more than the worth of the produce. And for a like reason the farmers have made as few purchases as possible at the stores, going to town only when absolutely in need of supplies.

INDUSTRIES THAT ARE AFFECTED. Lumbermen, oil producers and those en-gaged in various other industries, have also found, in the bad condition of the roads, an

insurmountable obstacle against the successful carrying on of their business. This state of things is found, not in Allegheny county alone, but throughout large portions of the State, as well as in Ohio, West Virginia and

It is somewhat remarkable, and not at all creditable to the people, that in Pennsyl-that the subject of roads and road-making and It is somewhat remarkable, and not at all vania, where most of the youngest settle-ments date back to the last century, the difficulties of travel should be almost as difficulties of travel should be almost as great at certain seasons as they were in is before the people of the State to-day. In no pioneer days, when the only roads were matter or branch of art, or industry, did our trails through the forests, with blazed trees predecessors seem to have been more careless. here and there serving as guideposts. And this, too, in a State where all the material for making good roads is found in abundance, and where every township and county deficiency of knowledge in constructing and has spent annually for scores of years thou- keeping highways in a good condition still sands upon thousands of dollars for time exists with all our modern improvements. The and labor devoted to "improving" the high-Ways!

AN UNPLEASANT TRUTH.

But this is the fact, which the exceptional quantity of mud and slush this winter has brought to the attention of the p ple with such force as to make the question of devising a remedy one of general interest throughout the Commonwealth, Governor Beaver made a move in this matter over a year ago.

ciay surface anomid be cut to at least the depth of a foot. It would be still better if the spade should go to the frost line; but probably the community that could afford to prepare such a foundation for a road could also afford a better superstructure than one of dirt and gravel. In a clay soil deep side ditches and denies and the state of draining are absolutely essential. These ditches should allow a fall of from two to three feet from the crown of the road. THE BEST SURFACE DRESSING. The substantial part of the road should be township should have one supervisor apsand. It is sometimes thought that the sand pointed by the court, not elected. This may

clay surface should be cut to at least the

absorptive quality, but usually the presence of the neighboring clay is sufficient to supply the the desire and evidence of the best citizens. sand in dry seasons with all the necessary In such case the supervisor would be free to moisture. The sand and the surface dressing keep his position by strict adherence to the may involve expense, but expense must be in-curred if a good dirt road is to be made in a engineer having the power under the sanction

clay soil. The best surface dressing for such a road as I have been describing is gravel or shale. If it can be afforded, limestons crushed into minute particles is most excellent for this purpose. A

particles is most excement for this purpose. A road to which this substance is applied requires a hard, smooth surface, for the action of water and the grinding of passing wheels transform the stone into a cement. Tanbark is also a very good top-dressing. It is unnecessary, how-ever, for any community in this part of the country to resort to such makeshifts, for sand and gravel are abundant and cheap enough to and gravel are abundant and cheap enough to warrant their use by a town or village that can afford to build any but the most primitive thoroughfares. THE STATE COMMISSION.

The members of the State Road Commission are: Sentors Harlan, of Chester; Mylen, of Lancaster; Sloan, of Indiana; Representative Forght, of Westmoreland;

DISPATCH: THE DISPATCH has, and will continue to take a deep interest in public highways in rural districts, believing it is a subject in which everybody is interested, for all have to use them. As the commission in charge of this yital question, of which you are a member, will soon meet, THE DISPATCH most respectfully asks for your views, briefly expressed, on the improvement of the country roads of the Com-monwealth. Will you please furnish answers to the following questions bearing on the sub-ject: 1. What do you consider the best system of

ountry road making? 2. How would you maintain public roads? 3. What is your opinion of the existing sys-em of allowing farmers to work out their taxes

roads? 4. What are your views on the chain gang sys-m in districts where prisons are located, and tem in districts where prisons are located convicts are idle, as in Allegheny county.

The replies, thus far received, are appended.

TOO MUCH HASTY WORK.

Supervisors Negligent of Their Dutles-The Present System Radically Wrong-Represcutative McCullough's Recommenda-

tions.

To the Editor of The Dispatch:

predecessors seem to have been more careless, than in the making and keeping of public roads, which are used continuously for travel by man and beast, night and day. The deficiency of knowledge in constructing and keeping highways in a good condition still exists with all our modern improvements. The roads are wrought upon every summer, and hundreds of thousand of dollars are paid or worked out upon them, all to no avail. There is no excuse, for the amount of money that is expended yearly should give us fair roads were made at the proper season, and with a view to permanency and durability, discarding the hurried temporary mannee of construction, we would not be long in finding a marked improvement upon our thoroughfares, The object and aims of many (not all) of our supervisors are to see how many rods or miles and his recommendations were followed out by the Legislature, which appointed a com-mission of 13 members to consider the sub-ject and suggest needed legislation. This commission will meet in Harrisburg roads, beyond a doubt. homes in the country. Our macadam therough-fares, as far as built, are now crowded with clitzens' homes. In ratio with the structure of macadam will these country homes of city merchants and professional gentlemen increase, and this within a radius of 40 miles. 8. R. DOWNING. WEST CHESTER, January 17, what can beyond a doubt.
You ask my opinion of the existing system. I consider it one of the lost arts, for a drive anywhere to-day will convince you that something is wrong with our present system. The roads have been worked upon since the settling of the State on this system, and we have to-day, with very few exceptions, no roads that are in passable condition. How would I construct roads? I should undoubtedly endeavor to construct them with a view to permanency, as taught by the Carthagenians, and now used by the Celestials. I am in favor of the Telford system of making roads, which is cheaper and far superior to macadam-GOOD DRAINAGE NECESSARY. Provision for Letting the Water Off an Im-To the Editor of The Dispatch: In answer to your letter of inquiry I will very briefly give you some of my ideas on the subject. In rayor of the renorm system of making roads, which is cheaper and far superior to macadam-ining when properly made; all culverts to ex-tend across the roads, and not balf way, as at present. With the abandance of stone found in every section of the State there could be in a few years passable roads at all seasons of the By answering your second question I think I will have fully answered the first one: "How would you construct public roads?" In view of the fact that many of our roads are narrower than they were originally laid out, I year without any increase of taxation. I am in favor of a general law, stating the kind and form of road to be made, and the State to pay a certain per cent for each rod of road made in conformity with this act; a report to be sent to the Commissioner of Highways when ap-pointed and granted the power. The roads to day appear to be like or-phans sadly nericeted. There should be a commissioner of highways to look after the interest. No manufactory or industry will prosper unless there is a competent head to manage and ascertain the facts in detail in re-gard to its movements. I am in favor of each interest is beview, the state is a the cost. year without any increase of taxation. I am in would first secure the proper width. I would contormity with this act; a report to be sent to the Commissioner of Highways when ap-pointed and granted the power. The roads to-day apnear to be like or-phans sadly neglected. There should be a commissioner of highways to look after the interest. No manufactory or industry will prosper unless there is a competent head to manage and ascertain the facts in detail in re-gard to its movements. I am in favor of each township having supervision over its own

PITTSBURG DISPATCH, MONDAY, JANUARY 20, 1890.

try roads is due to the entire lack of system, THE MACADAM SYSTEM. ond-I would build the roadbed of stor 8 to 12 inches thick, crushed, and packed solid Strong Argument in Its Favor by Mr. by heavy rollers, full in the center and Downing-What a Mile of Good Road ping to sides; then keep the water off.

Costs-State Road Supervision. Third-It is a miserable failure so far as Third-It is a miserable failure so far as road-making is concerned. In my opinion farmers' teams could be utilized to advantage in hauling stone with which to make the road-bed, under the supervision of some competent engineer or superintendent of roads. The work with plow, scoop, shovel and pick is, in very many instances, more than useless. Fourth-Convict labor might be used with good results in the districts in which prisons are located, but I doubt the pracheability of taking them into the country. However, I do not consider myself a competent judge of this chain-gang system. Respectfully yours, JOHN G. FOIGHT, MANOHDALE, JANUARY 17. To the Editor of The Dispatch: There should evidently be a State road administration or bureau with an engineer directing the road work of each county. Each should be mixed with clay on account of its seemingly take from the people a privilege, but

of the court to remove incompetent super

visors. I believe in macadam structure for worst

most traveled roads, for the plain reason that during February, March and April, when the

It may have been noticed that Mr. George

portant Item.

A WORD FOR THE SCRAPER.

Not Practical.

CONNEAUTVILLE, January 18.

SISTEM SORELY LACKING.

Wretched Condition.

Why the Reads Generally Are in

JACOBS OI

SURE

WA LO

CURES PERMANENTLY

LUMBAGO.

In Pain 30 Years.

Constantine, Mich., Feb. 16, 1857. Constantine, Mich., Feb. 16, 1857. I had pains in the back for thirty years. Confined to bed for weeks. Five years ago St. Jacobs Oll cured me: am weil and hearsy, no return of pain; can iff as much as ever. D. M. REARICE. AT DEUGOISTY AND DRALEDS. THE CHARLES A. YOULLER CO., Baltmare, MC.

CURE.

r pick.

FALSE TEETH IN HIS STOMACH.

A Prominent New Jersey Citizen Has a Sin-

gular Allment. weather is most severe and unbealthy it is best to have rapid transit. A clay road is an injury to the public during these months and cannot be touched at this time by skill, scraper, shovel CAMDEN, January 19.-Away up in the quiet little village of Windsor, Mercer county, N. J., where sensations are as rare as angels' visits, A macadam need not be so costly as pikes has occurred a curious circumstance over have been, in that macadam need not have the which the rural gossips have let their topgues have been, in that macadam need not have the bulk of pikes. A macadam is a compact, and in good measure an impenetrable bed, resisting wheel pressure from the surface, the pressure of the roller anticipating that of wheels, and saving bulk of metal to that extent. Over 40 miles of the roads and streets of Bridgeport, Conn., have been macadamized but four inches thick. The townships actioning Bridgeport wag unceasingly. The cause of the excitement in the byway village is the fact that Daniel M. Brown, the most promment resident, several months ago swallowed a full set of false teeth thick. The townships adjoining Bridgeport have followed, and 14 miles have been built of this thickness. The Street Commissioner, Mr.

months ago swallowed a full set of false teeth accidentally, and all the efforts of medical science to romove the set have been baffed. Brown is an elderly man and is in appearance an exact counterpart of Uncle Sam, being tall, raw boned, sharp featured, wearing a long, sandy-bued chin beard. For the first three or four days Brown was not troubled, and thought that the plate would not remain there long. A week later, how-ever, he was seized with a source form of dys-pepsia and every concelvable pain in bis ab-domen. Physicians were consulted in vain, and as the months rolled by and the set of false teeth refused to leave his stomach. Brown has been attacked by a medley of allments. Hea-became hoarse, and was compelled to give up his position as leader of the church choir. Next his lungs began to pain him, until it has become difficult for him to breathe. The un-fortunate man is now also suffering from heart disease and an incessant flightiness in the head. No relief has yot come to the sufferer. this thickness. The Street Commissioner, Mr. B. D. Pierce, was formerly superintendent of the roads in Central Park, New York, but find-ing the cost of the Central Park roads prohibit-ory, and accepting the distinction between bulk and strength, he made the successful experiand strength, he made the successful experi-ment of turning out a cheaper, because thinner road. The distinction is similar to that between a Russian droaka and an American burgy, or the old iron bridge of Plymouth, West England, that has three times the bulk of iron to the foot of a Mississippi bridge that carries the traffic of a continent. Of course the sand loam of Bridgeport is a help, inas-much as sand is a more favorable material for road structure than clar. But where a clay road is stripped of its loose surface and hard pan reached I think that a six inch depth of macadam, with fine crusher-made superstruct-

WHOLESALE CREMATION.

Seven Haudred Bodies to be Reduced to Ashes In Nine Days.

pan reached I think that a six inch depth of macadam, with fine crusher-made superstruct-ure, bound with two inches of siftings, rolled to a solidity that will prevent rutting, will be sufficient for the general travel of our State. By the macadam of our worst most traveled roads the greater saving in money is made. The average annual cost of repair of the roads of a township may be \$50. The worst clay roads may cost \$90, and the less traveled or sand loam roads may cost but \$10 in main-tenance. A new macadam need not cost for ten years over \$10 annually for repair. Thus, by stoning our worst roads, we save per mile annually \$80. Ten miles of this macadam in ten years will save \$5,000, sufficient where stone is pienty and near the operation, and where a portable crusher is used to build a six-inch road. NEW YORK, January 19.-Charles McLean, a contractor, has obtained the contract to de-stroy several hundred bodies that have been buried in the past 20 years in the State buryburied in the past 20 years in the State bury-ing grounds at Seguine's Point, Staten Island. They are all the bodies of persons who died of contagious diseases, and, after being exhumed, they will be burned in a crematory which is to be erected on the grounds. The ashes of the dead will be buried on Swinburne Island. Contractor McLean is required to complete the destruction of the bodies within nine days. After the bodies have been removed from Segnine's Point the grounds will be put in order and sold. inch road. The money tax is evidently better than the

PREACHING IN SALOONS.

New Temperance Crusade Organized in a New Jersey Town.

The money tax is evidently better than the "working-out" system for more than one rea-son. The May rounding up, or as we call it, the annual road pionic, is the most that farm-ers can give toward road repair. If within two weeks after the rounding up, the roads are de-stroyed by flood or rain they must virtually so remain for the year or until a trare leisure time. Thus our roads are at the mercy of rare opportunities for repair. As a result we have bad roads during most of the year. If, on the other hand, supervisors were permitted to employ stout capable men to save the roadbed by its constant drainage, and added to this, could use the scraper After every storm, the farmer would pay no more tax, but could devote the time expended in road service to home work and individual proft. I believe the gain in this would more than equal the share of tax he is perimited to work out, and beyond that we would have notably better roads. NEW BRUNSWICK, N. J., January 19.-As a result of the evangelistic services now in progress in this city under the Rev. B. Fay Mills a known as the Society of the Golden Sheaves, and on Monday they will begin going from sa-loon to saloon and also to cigar stores and pool rooms, praying with the young men there, and

arging them to join the church and become Thus far the women have met with little op-position in their visits to the saloons to ask for the privilege of holding meetings.

Catarrh to Consumption.

Catarrh in its destructive forcestands next to and undoubtedly leads on to consumption. It is therefore singular that those afflicted with this fearful disease should not make it the object of their lives to rid themselves of it. Deceptive Trainedies concocted by ignorant pretenders to medical knowledge have weakened the confi-dence of the great majority of sufferers in all advertized remedies. They become resigned to a life of misery rather than torture them-selves with doubtful palliatives.

What it Really is Explained by One of the Best Informed Men in America. The president of one of the leading New York Medical Colleges, in conversation with the writer the other evening, said: "'La Grippe,' the Russian influenza, that has "La Grippe,' the Russian influenza, that has caused so much talk, is a more severe affliction than people usually talnk. It arises mysteri-ously and appears to have its origin in the at-mosphere. The last time it visited America was in 1805, and it came then, as now, from Asia. The name 'influenza' comes from the suggestion that the malady was due to the 'in-fluences' of the heavenly bodies, but more modern science has discovered that it is due to the changes in the cause, it is a strong congestion ever may be the cause, it is a strong congestio of the blood vessels and mucous membrane, principally in the bead and throat, and nothing but strong stimulants will check this congestion and keep the blood actively circulating. For this purpose I know of nothing better than pure whiskey, and I believe Duffy's Pure Malt to be the blood and purset whiskew from to the

THAT TERRIBLE GRIPPE.

to be the best and purest whiskey known to the "Formerly this influenza was said to precede "Formerly this influenza was said to precede an epidemic of the plague, and the person who was about to be taken with the latter, had, as a preliminary, a fit of sneezing. Now it precedes a worse epidemic than the plague, namely, the torrible pneumonia. Its beginning is slight, but its ending is often terrible. Pains in the limbs, back, chest and head; a sore throat and lack of appetite; copious discharge at the nose; these are some of the symptoms of this dread disease. Upon the slightest approach of any of these symptoms, a nervous feeling, or lassitude, resort should be had to apure whiskey, which is the only cortain means of breaking up this epi-demic before it secures a hold upon the system or check it when it has become started. Care should be taken, however, to secure only that which is pure, as the article above named cer-tainly is."

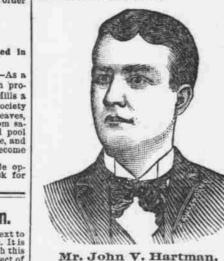
MR. A. K. NORRIS,

A well-known gentleman of Sharpsburg, residing on Eleventh street, and employed at the extensive steel works of Messrs. Spang, Chaltant & Co., of Sharpsburg, has passed through an eventful experience. His catarrh caused a stuffed-up feeling about his nose and eyes. The catarrhal secretion that dropped from his head into his throat was so tenacious and hard

to raise that in the morning it would often gag him and cause him to feel sick at his stomach. STEAMERS AND EXCURSIONS. His hearing became dull he took cold very easily, had no appetite in the morning, and as his food did not digest properly, gas formed in his stomach, causing pain. He often felt dizzy

STEAMERS AND EXCURSIONS. NORDDEUTSCHER LLOYD S. S. CO., Extablished 1857. Fast Line of Express Steamers from NEW YORK for SOUTHAMP. TON, LONDON and BREMEN. The fine steamers SAALE, TRAVE, ALLER, EIDER, EMS, FULDA, WERRA, ELBE and LAHN of 5500 tons and 6,000 to 5,500 horsepower, leaves NEW YORK on WEDNESDAYS and SAT-URDAYS for SOUTHAMPTON and Bremen. TIME From NEW YORK to SOUTHAMP. TON, 75, days. From SOUTHAMP. TON, 76, days. From SOUTHAMP. TON to LONDON, by Southwestern Railway Co., 2% hours. Trains every hour of the sum-mer scason. Railway carriages for London await passengers Southampton Docks on arri-val Express steamers from New York. These steamers are well-known for their speed, com-fort, and excellent cuisine. DELRICHS & CO., 2 Bowling Green, New York. MAX SCHAMBERG & CO., jal672-D Agents for Pittsburg. and lost flesh. He tried various treatments, but without success. He also used local treatments, but his disease gradually grew worse. In this condition he began treatment with the physicians of the Catarrh and Dyspepsia Insti-tute, 323 Fenn avenue, and became cured by their constitutional medicines, which are always curative and permanent in their action.

He can be seen at either his residence or place of business, and will gladly tell anyone further about his condition and cure.



"I was afraid of consumption. I had a con-

NEW YORK TO GLASGOW. Calling at MOVILLE, (Londonderry.) Cabla passage to Glasgow, Liverpool or Londo derry, \$5 and \$5. Round trip, \$96 and \$100. Second-class. \$50. Stewrage, \$20. MEDITERRANEAN SERVICE.



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Now Open With a Full Line Everything New. NO OLD STOCK, in low, medium and

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ennsylvania Lines.

Hid, Basf, 9:80 and S 6:30 p. m. Baiger, 1:80 p. m. McDonalds, 4 6:35 a. m., 40:00 p. m.
NORTH WEST SYSTEM-FT. WAYNE ROUTE.-Leave for Chicago. 4 7:25 a. m., 4 Li2:3, 4 1:00, 4 7:25 a. m., 4 Li2:3, 4 1:00, 14 7:45 a. m., 16 12:20, 19:00, 4 7:45 a. m., 12:10, 12:00, 14 7:45 a. m., 12:10, 14 7:45 a. m., 15:10, 14:10, 14 7:45 a. m., 15:10, 14:10,

Geo. W. Snaman, ALLEGHENY. jal8-118-stwr

PENNSYLVANIA BAILBOAD-ON AND after November 10, 1889, trains leave Union Station, Pittsburg, as follows, Eastern Standard

Station, Pittsburg, as follows, Eastern Standard Time: MAIN LINE EASTWARD. New York and Chicago Limited of Pullman Ves-tibule daily at 7:15 a. m. Atlantic Express daily for the fast, 3:20 a. m. Mail train, daily, except Sunday, 5:30 a. m. Sun-day, mail, 8:40 a. m. Day express daily at 8:00 a. m. Mail express daily at 1:00 p. m. Philadelphia express daily at 4:30 p. m. Eastern express daily at 7:15 p. m. Fast Line daily at 8:10 p. m. Greensburg express 5:10 p. m. week days. Derry express ling a. m. week days. Derry express ling a. m. week days. All through trains connect at Jersey City with boats of "Brooklyn Annex" for Brooklyn, N. Y., syoiding double ferriage and journey through N. Y. City. Trains arrive at Union Station as follows:

Express, for Biniraville. connecting for Butler. 515 p. m. Butler Accom. 5120 a.m., 1255 and 545 p. m. Springdale Accom. 5120 a.m., 1255 and 545 p. m. Preeport Accom. 515, 5270 and 1140 p. m. On Sunday. North Apollo Accom. 515 a.m. North Apollo Accom. 5100 a.m. and 5200 p. m. Allogheny Junction Accommodation. 512 a.m. Biairsville Accommodation. 512 a.m. Trains arrive at FEDERAL STREETSTATION: Express, connecting from Butler. 1023 a.m.

 For Monongahola City, West Brownsville and For Monongahola City, West Brownsville and Uniontown, 10:40 a.m., For Monongahola City and West Brownsville, 7:05 and 10:40 a.m. and 4:40 p. m. On Sunday 1:31 p. m. For Monongahela City, 5:40 p. m., week days.
 Draveshurg Ac., week days. 5:20 p. m. West Elizabeth Accommodation, 5:20 a. m., 2:00, 5:20 and 11:33 p. m. Sunday, 3:40 p. m. Ticket offices-Corner Fourth avenue and Try street and Union station. CHAS, E. PUGH, J. R. WOOD, General Manager. Gen'l Pass'r Agent. NEW YORK TO GIBRALTAR AND NAPLES Contras samages. Gen 1 rass 7 Agent. PITTSBURG AND LAKE KRIE MAILBOAD COMPANY. Schedule in effect Norember 17, 1886. Central time. DurANT-For Cloveland, 5:00 \$5:00 a.m., \$1:35, \$4:20, \$1:30 p. For Cloveland, \$1:00 \$5:00 a.m., \$1:35, \$4:20, \$1:30 p. For Cloveland, \$1:30 p. For Barlalo, \$2:00 a. m., 4:21, \$1:30 p. m. For Salamanca, \$5:00 a. m., 4:21, \$1:30 p. m. For Salamanca, \$5:00 a. m., 4:21, \$1:30 p. m. For Salamanca, \$5:00 a. m., 4:21, \$1:30 p. M. For Salamanca, \$5:00 a. m., 4:20, \$1:00, \$1:50, \$1:00, \$1:50, \$1:50, \$1:00, S. S. BOLIVIA, SATURDAY, FEBRUARY 22, Cabin passage, \$50 to \$100. Drafts on Great Britain, Ireland or Italy, and leiters of credit at favorable rates. Apply to HENDERSON BRUTHERS, N. Y., or J. J. MCORMICK, GB and 401 Smithfield st.; A. D. SCORER & SON, 415 Smithfield st., Pittsburg; W. SEMPLE, Jr., 155 Federal st., Allegheny. OC2-MWF prine, 196, 516, 516, 1970, 506, 512, 501, 1010
pr.m.
ARRIVE-From Cleveland, 6225 a.m., 712.30, 546, 7535 p.m. From Clucinnait, Chicago and St. Louis, 71250, 7155 p.m. From Bulfalo, 7623
a.m., 712.30, 10 p.m. From Salamanca, 7233, 7155 p.m. Front Vongstowin and New Castle, 7525, 7920 a.m., 71226, 526, 7155, 10 p.m. From Beaver Falls, 527, 623, 725, 70, 7200 a.m., 71230, 120, 546, 7155, 10 p.m. From Beaver Falls, 526, 623, 725, 70, 7200 a.m., 71230, 120, 546, 7155, 10 p. m.
P. O. & Y. trains for Manafield, 8:30 a.m., 8:30, 520 p.m.
P. C. & Y. trains for Manafield, Easen and Beechmont, 5:30 a.m., 7230, 7530, 500 p.m.
P. C. & Y. trains from Manafield, Easen and Beechmont, 736 a.m., 7330 p.m.
P. McK. & T. K. R. -DEFART-For New Haven, 175:30 a.m., 7330, 510 p.m.
ARRIVE-From New Haven, 75:30 a.m., 75:18 p.m.
ARRIVE-From New Haven, 75:30 a.m., 7128, 115 p.m.
For McKeesport, Elfabeth, Mononrahele Clir p. m. From Wess Clinabeth, Monongahela City Sci McKeesport, Elizabeth, Monongahela City and Belle Vernon, 6:30, 17:30, 11:15 a. m., 18:30, 19:50 a. m.

WHITE STAR LINE-FOR QUEENSTOWN AND LIVERPOOL. Royal and United States Mail Steamers.

Boyal and United States Mail Steamers. Britaunic, Jan. 22, 6 am Britannic, Feb. 19, 5 am "Adriatic, Jan. 23, 1 pm "Germanic, Feb. 23, 1 am "Ceitic, Meh. 4, 3 pm From White Star dock, 100t of West Tenth at, "Second cabin on these steamers. Saloon rates, 800 and upward. Second cabin, 830 and upward, according to steamer and location of bertb. Ex-cursion tickets on favorable terms. Steerage, 800, White Star drafts payable on demand in all the principal hanks throughout Great Britain. Ap-ply to JCHN J. MCCOURNICK, 600 and 601 Smith-field st., Pittsburg, or J. BRUCE ISMAY, Gen-eral Agent, 41 Broadway, New York. Jal4-D

United States Mail Steamers.

Sall every SATURDAY from

route to Algiers and

to add my testimony to the hundreds already

published, to my complete cure by these physi

"I now weigh more than ever before and feel

"JOHN V. HARTMAN, 1214 Main street,

cians.

well and strong.

Sharpsburg."

ANCHOR LINE.

Tuesday next to begin its k. In view of the widespread 00 work. interest in the subject, and to ascertain as far as possible the views of the commissioners as to the best system of road-making, THE DISPATCH some days ago addressed a circular letter to each commissioner inviting him to state his opinion. Their replies, together with the letter of inquiry, will be found further on. But, before giving them, it is desired to call attention to an interesting paper on the same important subject. contributed to Harper's Weekly by Henry Loomis Nelson.

WHERE HIGHWAYS ARE PASSABLE.

Although his article deals mainly with the roads of New England, it doubtless contains hints that may be useful to those seeking to learn how roads may best be built and kept in good condition. Mr. Nelson speaks of the excellence of the roads in certain sections of New England, and finds that the custom of having weekly market days in small towns has done much toward bringing about this result. But the condition of the roads in other places-the "wagonless districts"-leads him to the conclusion that "it is too late in the world's progress to say that the condition of our highways is an

evidence of our civiliantion." "It is essential," he continues, "that everyone who is interested in road-making should know how to build a good dirt read, for dirt roads are a great and extensive inheritance from our ancestore, and they abound in every section of the land." He then gives statistics from the census of 1880, showing that at that time 42 New England cities had 3,604 miles of streets. Of these only 461 were paved, 2,449 miles were gravel roads and 694 miles were the common dirt roads. The percentage of paved streets was a little larger in New York State. The writer continues: It is evident from this that when we say "the

It is evident from this that when we say "the diff road must go," we are reckoning without our host. Roads are improving every year, and will continue to improve but the dift road has such a hold upon the mind of the average taxpayer who walks, and of the average village officer and roadmaster, who knows that the walking gentlemen out yout the men who ride in chaises, that it is evident that we shall be obliged to make the best of it for sometime to come.

DIET AND STONE IN ROADS.

Gravel roads and dirt roads are the same, and no difference can be made between them in the treatment of this subject, except as the gravel road is one of the best forms of the dirt road. Even a road upon which there is a top-dressing of stone, there being no artificial foundation, is a form of dirt road. Any way whose organized basis is earth is a dirt road, although there seems to be a prevailing opinion among the roadmasters of this immediate vicinity that a slight sprinkling of bluestone on top of the a slight sprinkling of bluestone on top of the sand or clay substratum changes the character of the road, and elevates it above the ordinary dirt highway. And yet, generally, this little sprinkling of stone simply adds to the inconvenience and danger of the traveler, and does no permanent geod. Everyone familiar with country life has experienced the disconiforts of jolting over the broken stones occasionally scattered upon a road's surface. Usually those who are com-pelled to drive on a road that has been treated a road's surface. Usually those who are com-pelled to drive on a road that has been treated in this manner get over as far as possible on one side, so that a track is soon worn there, the rest of the way being left untouched, ex-cept by vehicles that have been compelled to turn out. Thus one side of the road needs repairing before the other has begun to show tigns of wear. Mr. Nelson tells how a bad road is built.

seconding to the method long practised by rural rondmasters, a plow and a spade being all the tools required.

WHAT TO DO WITH CLAY. The treatment of clay and sand roads is

discussed as follows: A fundamental fact that must be recognized

by those who are charged with the task of constructing dirt roads is that a road with a clay surface cannot be good. The surface must be composed of some substance that will not re-taun water. Another fundamental fact is that while sand makes a much better road than may, it is too dry and too easily disintegrated by passing wheels for a destrable wagon way. Yet, during most of the year in the northern climate, a sand road is much better than one of

hav passing wheels for a desirable wagon way. Yet, during most of the year in the northern elimate, a sand road is much beiter than one of ling. The proper method of treating clay in making a dirt road is to dig it out, and to cart much of it away. A bed should be prepared for the reception of a foreign substance. The

manage and ascertain the lacts in detail in regard to its movements. I am in favor of each to be Teiforded, then the cross or by-roads.
I favor electing supervisors for a longer term than at present, and a law compeling them to make the roads as specified in the bill, or receive no State aid.
As regards the chain gaps. I am not prepared to state how to manage the prisoners. If they could be divided into squads and distributed all over the districts without too much watching, and made break stones on our public roads, it would be agood thing for idle prisoners as well as for the public highways.
M H. MCOULLOUGH, TARENTUM, January 16.
The Condition of the Country Ronds a Pablic filsfortane.
The Condition of the Country Ronds a Pablic filsfortane.

Public Misfortune.

To the Editor of The Dispatch: Your kind note of yesterday, making inquiry relative to my views on the improvement of the country roads of the Commonwealth, received. I consider that we have no system of roadmaking in Pennsylvania, and with a history of more than 200 years the condition of our roads is simply a disgrace to our Common wealth. I believe that the State should give liberal aid Its Use Advecased Where Macadamizing Is

toward the construction of our highways, just as she does to our publicachools. I believe that better roads mean better values to real estate in town and country and better citizenship. But in reference to legislation on To the Editor of The Dispatch: this subject, we should be very careful to do

this subject, we should be very careful to do that which will be the preatest benefit to the argest number of our clitzens, with the least oppression to all; and that the farming interests hould be protected to the fullest extent, as it is an interest which at this time needs all the relief that can be afforded to it. It will be my carnest efforts to do what I can to scing such legislation that will give us be-ter roads with the least burden to individual state need have no fear of any system being which they are already carrying, but, on the other hand, such a system as will improve their outline. I fully realize that the dominision has before it a task of no small magnitude. I therefore trust that svery clitzen who feels an interest in this work will give us all the aid they can. A. D. HARLAN. COATESVILLE, JANUARY 17.

SUPT. M'CARGO'S VIEWS.

To the Editor of The Dispatch: Macadamized Roads, Systematically Con-In answer to your queries I would say: First-The miserable condition of our coun structed, the Best.

Mr. David McCargo, General Superintendent of the Allegheny Valley Bailroad, wants to have the roads improved, but does not favor the scheme of putting the idle convicts at work upon them. He says the idea is all right in theory, but not in prac-

tice. He answers as follows: No. 1-For county roads I regard macad-amized highways as best for our State. No. 2-They should be constructed according to specifications made by competent engineers, and the contracts should be let to the best bidders.

No.3-I think the system of allowing farmers

.8

But this will never do. Catarrh must be met But this will never do. Catarin must be met at every stage and combated with all our might. In many cases the disease has assumed dangerous symptoms. The bones and cartilage of the nose, the organs of hearing, of seeing and of tasting so affected as to be useless, the uvula so elongated, the throat so inflamed and distincted as to produce a constant and dis-

irritated as to produce a constant and dis-

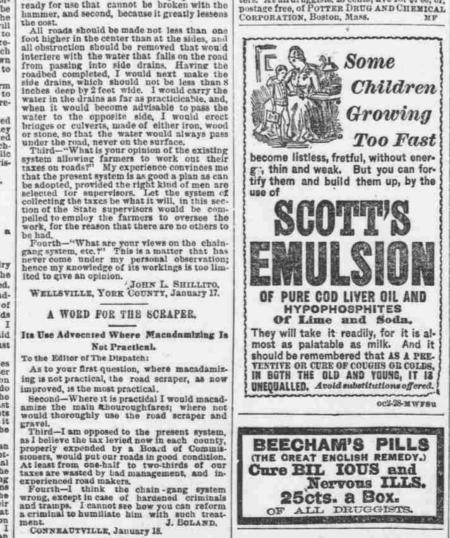
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City Ticket Office, 639 Smithfield Street, BALTIMORE AND OHIO RAILKOAD, Schedule in effect Norember 10, 1889: For Washington, D. C., Railimore, Philadel-phia and New York, '580° a. m., 21:00, '9:20° p. m. For Connellaville, 25:00 a. m., 21:00, '9:20° p. m. For Connellaville, 25:00 a. m., 21:00, '9:20° p. m. For Connellaville, 25:00 a. m., 21:00, '9:00° a. m., 25:00 and 26:00° p. m. For Mit. Pleasant, 25:00, '5:00 a. m., and '10:00° a. m., '2:35, 15:00° a. m., 25:00 a. m., and 21:00° and 24:00° p. m. For Wash-ington, Fa., '7:05° and 29:00° a. m., '7:35° a. m., '7:30° p. m. For Chickness and St. 200 a. m., '7:35° p. m. For Wheeling, '7:05° a. m., '7:35° p. m. For Chickness, '7:05° a. m., '7:35° p. m. For Markens, '7:05° a. m., '7:35° m. Trong televing c. m. From Wheeling, '7:55° Connellaville a seconimodation at §5:35° a. 'm. Sinday only. The Pittalour Transfer Company will call for

Competitivitie accommodation at pose a me Senday colly. The Pittaburg Transfer Company will call for and check baggage from hotois and residences upon orders left at B. & O. tleket office, corner Fifth ave, and Wood st., or 401 and 609 Smithfield st. CHAS. O. SCULL, Gen. Pass. Agent. J. T. O'DELL, General Manager. A LLEGHENY VALLEY SAILBOAD-A LLEGHENY VALLET RAILMOAD-A Trains leave Union Station (Eastern Standard time): Kittanning Ac., 6:55 a. m.; Niagara Ex., (aily, 8:55 a. m., Huiton Ac., 10:16 a. m.; Valley Camp Ac., 12:05 p. m.; Oli City and Juilois Ex-press, 2:06 p. m.; Huiten Ac., 5:00 p. m.; Kittanning Ac., 4:00 p. m.; Braeburn Ex., 5:00 p. m.; Kittanning Ac., 4:00 p. m.; Braeburn Ex., 5:00 p. m.; Kittanning Ac., 4:00 p. m.; Braeburn Ac., 6:00 p. m.; Hui-ion Ac., 7:50 p. m.; Buffaio Ex., daily, 8:90 p. m.; Huiten Ac., 8:45 p. m.; braeburn Ac., 11:30 p. m.; Church trains-Hraeburn, E:ADP, m. and 9:35 p. m. Pullman Sleeping Cars between Pittaburg and Huffaio, Jas. F. ANDERSUN, G. T. Axt.; DAVID MCCARGO. Gent. Supt.

G. T. Ast.: DAVID MCCARGO. Gen. Supt.
 PHITTSBURG AND CASTLE SHANNON E. R. Winter Time Table. Unand after December 1889, until further notice, trains will run as follows on every day, except Sunday. Eastern standard time: Leaving Phitaburg-5:20 a. m., 7:10 a. m., 8:00 a.m., 9:20 a. m., 11:20 a. m., 1:40 p. m., 3:40 p. m., 5:10 p. m., 5:50 p. m., 6:20 p. m., 9:20 p. m., 11:20 p. m. Arlington-5:40 a. m., 0:20 a. m., 7:10 a. un, 8:00 a. m., 1:50 p. m., 2:20 p. m., 11:20 p. m., 5:10 p. m., 1:50 p. m., 2:30 p. m., 2:50 p. m., 5:10 p. m., 9:30 p. m., 2:10 p. m., 12:50 p. m., 5:10 p. m., 9:30 p. m., 2:10 p. m., 12:50 p. m., 5:10 p. m., 4:20 p. m., 5:00 m.

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