CHILDREN'S EMPLOYMENT COMMISSION 1842.

Children's Employment Commission.

REPORT by JAMES MITCHELL. ESQ., LL.D., on the Employment of Children and Young Persons in the Coal and Iron Mines of South Staffordshire, and in the Iron Smelting Works of those Districts; and on the State, Condition, and Treatment of such Children and Young Persons.

Edited by Ian Winstanley.

Picks Publishing

Published by:-

PICKS PUBLISHING
83. Greenfields Crescent,
Ashton-in-Makerfield,
Wigan WN4 8QY
Lancashire.
Tel:- (01942) 723675

Coal Mining History Resource Centre

With Compliments

Ian Winstanley.
83, Greenfields Crescent,
Ashton-in-Makerfield,
Wigan. WN4 8QY.
Lancashire. England

Tel & Fax;- (01942) 723675.
Mobile:- (0798) 9624461
E-mail:- ian.winstanley@blueyomder.co.uk
Web site:- http://www.cmhrc.pwp.blueyomder.co.uk

COMMISSION

(UNDER THE GREAT SEAL)

FOR INQUIRING INTO THE EMPLOYMENT AND CONDITION OF CHILDREN IN MINES AND MANUFACTORIES.

VICTORIA, by the Grace of God, of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith: To Our trusty and well beloved Thomas Tooke, Esquire, Thomas Southwood Smith, Esquire, Doctor in Medicine, together with Leonard Horner and Robert John Saunders, Esquires, two of Our Inspectors of Factories, Greeting:- WHEREAS, an humble Address was presented unto to Us by Knights, Citizens and Burgesses and Commissioners of Shires and Burghs in Parliament assembled, humbly beseeching Us that We should be graciously pleased to direct an Inquiry to be made into the Employment of the Children of the Poorer Classes in Mines and Collieries and the various branches of Trade and Manufactures in which numbers of Children work together, not being included in the provisions of the Acts for regulating Employment of Children and Young Persons in Mills and Factories and to collect information as to the time allowed each day for meals and as to the actual state, condition and treatment of such Children and as to the effects of such Employment, both with regard to their morals and their bodily health; NOW KNOW YE, THAT WE, reposing great trust and confidence in your ability and discretion, have nominated, constituted and appointed and do by these presentiments nominate, constitute and appoint you the said, Thomas Tooke, Thomas Southwood Smith, together with, Leonard Horner and Robert John Saunders, to be Our Commissioners for the purposes aforesaid and We do hereby enjoin you to obey all directions touching the premises which shall from time to time be given you, and any two or more of you, by one of our principle Secretaries of State and for the better discovery of the truth in the premises, we do, by these presentiments, give and grant to you, or any two or more of you, full power and authority to call before you such persons as you will judge necessary, by whom you may be the better informed of the truth in the premises, and to inquire of the premises and every part thereof, by all other lawful way and means whatsoever and We do hereby also give and grant unto you, or any two or more of you, full power and authority when the same shall appear to be requisite, to administer an oath or oaths to any person or persons whatsoever, to be examined before you, or two or more of you, touching or concerning the premises and Our further will and pleasure is, that you Our said Commissioners, or any three of you, do, with as little delay as may be consistent with a due discharge of the duties hereby imposed upon you, Certify to Us, under your hands and seals, or under the hands and seals of any three of you, your several proceedings in the premises; And We further will and command, and by these presents ordained, that this Our Commission shall continue in full force and virtue, and that you, Our said Commissioners, or any two or more of you, shall and may from time to time proceed in the execution thereof, and of every matter and thing therein contained, although the same be not continued, from time to time by adjournment: AND WE HEREBY COMMAND all and singular Our Justices of the Peace, Sheriffs, Mayors, Bailiffs, Constables, Officers, Ministers, and all other of Our loving Subjects whatsoever, as will within Liberties as without, that they may be assistant to you and each of you in the execution of these presentimens. And for your assistance in the due execution of this Commission, We have made choice of Our trusty and well beloved Joseph Fletcher, Esquire, to be the Secretary of this Our Commission, whose services we require you to use from time to time, as occasion may require. In witness thereof, We have caused these Letters to be made Patent. Witness Ourself at Westminster, the Twentieth day of October, in the Fourth Year of Our Reign.

By Writ of Privy Seal,

EDMUNDS.

LETTER OF INSTRUCTIONS EXTENDING THE TERMS OF THE COMMISSION TO "YOUNG PERSONS"

Whitehall, February 11th, 1841.

GENTLEMEN,

THE QUEEN having been pleased to comply with the prayer of an humble Address presented to Her Majesty, in pursuance of a Resolution of the House of Commons, dated 4th. of February, 1841, 'That Her Majesty will be graciously pleased to direct that the Commission appointees in answer to an Address of this House, on August 4, 1840, for the investigation of certain branches of Infant Labour, do include within its inquiry the Labour also of Young Persons designated as such by the provisions of the Factory Act' I am delighted by the Marquis of Normanby to desire that you will include within your inquiry the Labour of Young Persons designated as such by the provisions of the Factory Act accordingly.

I am, Gentlemen,
Your Obedient Servant,
(Signed) F. MAULE.

The Commissioners for inquiring into the Condition of Children employed in Mines, &c.

CONTENTS

Children's Employment Commission.

REPORT by JAMES MITCHELL. ESQ., LL.D., on the Employment of Children and Young Persons in the Coal and Iron Mines of South Staffordshire, and in the Iron Smelting Works of those Districts; and on the State, Condition, and Treatment of such Children and Young Persons.

TO HER MAJESTY'S COMMISSIONERS.

SOUTH STAFFORDSHIRE COAL-FIELD.

Gentlemen,

BEFORE entering upon the matters which more immediately affect the condition of the children and young persons employed in the mines, I consider it necessary to show who are the parties who give them employment and upon by whom their prosperity and happiness depend. These are the proprietors, the tenants and the butties or contractors.

OF THE PROPRIETORS.

Some of the proprietors of the coal-mines work them on their own account but the greater part let them to tenants on certain conditions, the chief of which is the payment of a royalty in proportion to the coal raised. The amount of the royalty varies in different mines, according to the supposed abundance of coal and facility of working. Thus a royalty of one-third is not unusual in mines in the deep bed of coal known by the name of the ten-yard coal, whilst there are other mines for which a royalty of one-eighth is thought sufficient. The principle which fixes the royalty is exactly the same as that which fixes the rent of land, according to its degree of fertility. In order that the landlord may not suffer from the tenant neglecting to work with sufficient energy the mine which he has taken, there is a covenant in which the tenant undertakes to bring up a certain amount every year and if he do not do so, at all events he must pay the same royalty as if he did. This prevents negligence on his part, and also prevents him from retaining possession of the mine and land after the coals are exhausted.

Sometimes a mine is let at a fixed amount of money per acre, to be paid as the mine is worked, and the tenant is bound to work a certain quantity per annum, or, at all events, to pay for it. The landlord must employ persons to watch the progress of the mines, to see what is the amount worked out by die tenant, that he may be made to pay accordingly. The persons so employed are called ground bailiffs, - originally underground bailiffs but there is a disposition to abbreviate, more particularly by the omission of prefixes indicating, or appearing to indicate, inferiority.

The ground-bailiff is also employed to visit frequently the mines worked at a royalty, in order to see that they are worked clean and in a proper business-like manner, otherwise it might happen that the tenant might dig out only the best quality of coals and from the places most accessible, leaving much of the mine unworked and thereby the landlord would not receive the benefit of a great part of his property.

The ground-bailiffs have to see that no trespass is committed on the mines by covetous neighbours.

. The ground-bailiff when he goes under ground, conducts his operations by means of the mariner's compass but the instrument is on a large scale, with the 360 degrees of the circle laid down upon it and is called a dial. By observing the direction of the paths in the pit and measuring the lengths, he can lay down the plan on paper, just as a sailor lays down the ship's track by the courses and the distances sailed, as entered in the log-book.

When a landlord lets his pits to different tenants, there is inserted a clause in every lease,

securing to the neighbours the facility of entering and examining a pit. In the case of pits belonging to two different proprietors a mutual permission to enter and examine is granted by courtesy.

OF THE TENANTS.

The tenant who takes a lease of a coal-mine is usually an iron-master, that is a manufacturer of iron and who digs the coal for his own use or it may be a person who intends to raise the coal to sell it to the iron-masters, or for the consumption of towns. The tenant who is about to work a pit has to be at the expense of sinking a shaft, that is of digging a round opening into the ground, usually about seven feet in diameter, which is done precisely in the same manner as a great well is dug in the country about London. The inside of the shaft is built round with bricks as the work proceeds, by the process called by builders under-pinning and care is taken, as much as possible, to shut out water from intruding at the sides. A second shaft has also to be dug, generally, not far from the first shaft, in order that when the mine is at work there may be effected a circulation of air. This is produced by placing a lamp consisting of a broad weighty stand, from which rises a stalk of iron several feet, which at the top spreads out its bars, in which is placed the fire. This fire burns vehemently and causes a strong current to ascend the shaft, which, as a necessary consequence, causes a strong current to descend the other shaft. When the workings of the mine have become extensive, it is necessary by a system of doors to guide this current, so that after descending the one shaft it shall pass all round the mine before coming to the other. The tenant has also to erect a powerful steam-engine and an engine house and to provide all the chains and other tackling necessary for drawing up the coals from the mine. In the abbreviated language of business, he has to provide the drawing power. He has also to provide rails to be laid down in the gateways or roads in the mines below, as also pumps for drawing up the water.

Some iron-masters, in addition to mines which they rent, have small properties of their own.

There are many properties of exceedingly small size, as two or three acres. An acre, where there is abundant coal, may sell on the average at £1000, but sometimes even £1500.

The sinking of the two shafts in a mine 300 feet below the surface and providing the steam-engine and all the other parts of the moving power, may require a capital of £6,0001, and very often it is much more.

Before beginning to work the pit, all the vegetable soil is cleared off the surface and placed in a heap. After the pit is exhausted all the rubbish is levelled and the vegetable soil is spread over it. This is done either by the landlord or by the tenant, according to the conditions of the lease.

. The ironstone mines are taken in the same way as the coal mines, by persons who smelt the ironstone in their own blast furnaces, or who sell the ironstone to iron-masters.

OF THE BUTTIES OR CONTRACTORS.

The contractors, who do the work in the mines in some parts of the country, are called charter-masters, but in South Staffordshire they are usually called butties. A butty is generally a steady, well-doing man, who has risen from being a common workman by his good behaviour and power of self-restraint. His business requires capital, as he provides the tools for the men, also the cars and the horses, in the pits and is often at a considerable outlay for wages in the necessary preparations, in cutting out gateways through the pit and undergoing masses of coal, before he is able to send much coal up the shaft and begin to receive charter from the tenant or proprietor.

It is stated that sometimes a butty will have laid out a capital of £500. In this way, and some butties are reputed to be worth thousands of pounds but few of them are possessed of so much property and the greater part are in very limited circumstances.

The butty is entitled to have any water which may come into the pit drawn off at the expense of the employer. In the technical language of the miner, he is entitled to have water-ease. If an irruption of trap-rock shall be found to have occurred, it is the employer who is to be at the expense of cutting through it. If in consequence of a fault the bed of coal is lost, it is the business of the employer to find it again. In general, all difficulties which could not be foreseen and of an unusual nature, are to be removed at the expense of the employer, and not of the butty. The average charter paid to the butty is from 2s. 6d. to 3s. 6d. - say 3s. - for every ton, but in some troublesome pits about Rowley it is as much as much as 4s. and within the district there are pits where it is 4s. 6d. In some mines an account is taken every Saturday, but generally it is

every second Saturday, and in some instances only every fourth Saturday. These are called reckoning-days, when the butty receives his money and he pays the men and boys employed by him. On the other Saturday, in some mines, they draw on account. The butty himself goes down into the pit in the morning with his men, distributes their work, and remains with them all day to direct them and keep them to their duty. He has under him a foreman who is called the doggy. This expression alludes to the relation of the butty to the foreman being similar to that of shepherd and dog. Nicknames are of almost universal use amongst the miners, and give no offence. A man is often better known even to his own family by his nickname than he is by the name which properly belongs to them.

In order to facilitate the understanding of the employments iii the mines, I shall endeavour to describe what was observed in several visits to the coal-quarries and an iron-mine.

VISIT TO A COAL-PIT, NEAR DUDLEY.

This pit is under the care of the trustees of the late Lord Dudley and is at Broad Park, near Holly Hall, about half a mile from Dudley, on the Stourbridge road. Mr. Samuel Holden Blackwell was so obliging as to accompany me and explain the operations. After a skip loaded with coals was drawn up, a covering of the mouth of the shaft was wheeled forward and the skip was let down upon it and was unloaded of about 25 cwt. of coals. The party about to descend, four in number, then stood upon the skip and laid hold of the chain to which it was attached. The skip was then hoisted a little to allow the covering to be wheeled off. We then descended with an agreeable, gentle motion, and soon observed the light to become less and less, until we were in perfect darkness, and ere long were at the bottom of the shaft. When we looked up the mouth of the shaft seemed to be the size of a sugar-basin.

There were men in readiness at the foot of the shaft, who handed to each a candle, which we held by a piece of clay attached to the end of it. In a short time the eyes became reconciled to the sudden change of light, and we proceeded forward. The great road or gateway along which we passed was cut out of the coal, seven or eight feet wide and about nine feet high. The thickness of the seam, being the ten-yard coal, would have allowed of making the road of greater height but that would have rendered it more dangerous in case of anything falling out of the roof, from the velocity acquired in descending from so great a height. A railway is laid along the middle of the road to make it easier for the horses to draw the cars. Soon it became necessary to stand to one side to make way for the horses drawing cars, each horse conducted by a boy of thirteen or fourteen, the lad naked from the waist upwards, and marching, his right hand at the bridle.

. We were conducted to a stable where were some horses eating and drinking, and apparently very comfortable. Their skins were smooth and glossy, and the animals were fat, which is attributed to the warm uniform temperature. It sometimes happens that, when a horse is for the first time brought down into a coal-pit he falls in a fainting fit, which is supposed to arise from fear. A horse which has been brought down into a coal-pit is not for ever doomed to be deprived of the light of day. Some of these horses had been up, and been put to grass several times. It was stated afterwards, by a witness at Buston, that donkeys could not endure the heat of the coal-mines, but were sometimes employed in the iron-mines, which are always found to be much cooler than the coal-mines, although both may be at the same depth from the surface of the earth.

We came at last to the farther extremity of the pit in that direction, and then diverged by a working or treading from the gateway to the left, to a place where men were at work. The chief miners, the undergoers, were lying on their sides, and with their picks were clearing away the coal to the height of a little more than two feet. Boys were employed in clearing out what the men had disengaged. Portions are left to support the great mass until an opening is made on each side of the mass and also part is taken away from the back. This undergoing is a dangerous part of the work, as, notwithstanding all that experience and judgement can do, occasionally too much is taken away, and a mass of coals will suddenly fall and crush the men and boys engaged. Fortunate are they if they escape with their lives, but broken bones they cannot fail to have to endure.

In working the coal-mines, the gateways are carried forward to the farthest part of the limits of the mine, and they do not begin to excavate near the shafts and for this reason, that after the coal is taken out there is a considerable chance that the roof of the pit may fall in, and if such a thing were to happen near the shafts it would then be impossible to continue the operations until new shafts were made, which would be a work of great expense and delay, whereas, if they

begin at the farthest boundaries and work towards the shafts gradually, if the roof do break in and the ground sink, it does not prevent the working of the rest of the mine.

A person visiting a mine which has been worked for several years will see very little more than in a pit which has been worked but a short time, because as the coal is taken away the small coal is piled up in the space left void, and a wall occasionally built, and a little farther off another wall, - dust of the calcined ironstone being put between, so that there are only the gateways and the workings to be seen. The small coal is piled up and shut out from the air, not only for the purpose of keeping up tile roof, but to prevent spontaneous combustion, which, were there access to the air, would, in all probability, take place. Spontaneous combustion of small coal is known to the fire-offices in London as occasionally a cause of fire.

Fires in mines may arise from the spontaneous combustion of iron pyrites, or of the slack or small coal itself.

When a coal-mine is discovered to be on fire, one of the modes of extinguishing it, if there be a plentiful spring, is to discontinue working the pumps, and allow the water to accumulate. The shafts must also be stopped up so as to exclude the ingress of air and after some time the fire will have become so low as to render it safe for the men to go down and build up a wall in front of it. Then another wall is begun about six feet off from the first wall, and as it is going on, mine-dust, that is dust from the calcined iron-ore, is sent into the mine and crammed between the two walls and when this operation is carried to the top of the pit the air is effectually shut out and the fire is extinguished, or at any rate made to burn so slowly as to occasion no danger.

In some parts of the South Staffordshire coal-field, smoke is seen issuing from the ground. This is the case in that part of the town of Dudley which is on the Stourbridge road. Smoke may be seen distinctly issuing at more places than one, and it is stated that in one of the wells the water is sufficiently hot to be used for washing and other culinary purposes. This part of the town is built over a pit, from which the good coal has long since been extracted and what is now on fire is the slack or small coal left behind. Smoke and steam are seen issuing from crevices on both sides of the road and on holding the hand to the place the stones are felt to be warm, as also the steam issuing.

Were a shaft to be sunk in this place the flames would burst forth, therefore it is not allowed. One shaft was opened, but it was found necessary to stop it up.

From the main gateways of a mine the workings are carried on both to the right and the left and each working may be considered as a side-road, or by-road, communicating with the great or main gateway.

It is a fine sight to see the miners congregated at dinner, in a large dining hall cut out of the coal. There they sit, naked from the middle upwards, as black as blackamoor savages, showing their fine, vigorous, muscular persons, eating, drinking, and laughing. They sit an hour, for, one or two and then resume their labours.

Two kinds of gas are produced in the mines which are destructive of human life. One is the carbonic acid gas, or, as it is called, damp, by which a miner may be damped to death, that is choked and the other is the carburetted hydrogen gas, which is commonly called the sulphur, by which a miner may be scorched or burned to death, or he may be dashed before it by its explosive force, or burnt under the ruin which it occasions, or may be suffocated by the foul air after the explosion.

In the mine visited near Dudley, the candles of three of the party out of four who were in company in one place went out. On lighting them and holding them a little higher up no inconvenience was experienced, as the carbonic acid, being weightier than the air, fails as low down as it can. It is also the case in the mines as it is in the wells around London, that man can live in an air strongly impregnated with carbonic acid gas long after candles cannot be made to burn. There is, therefore, full warning against this danger.

The ascent from the pit is the reverse operation of going down. The men stand on the foot of the skip and hold of the chains and a small bit of candle is stuck at their feet. Gradually they ascend through the dark shaft and at last the light of day becomes visible and in due time they come to the top. The covering is rolled forward and the skip is let down upon it. It is necessary for a visitor to go immediately into the hovel to the great fire and put on a warm great-coat, to prevent suffering from the cold after having been down in the warm atmosphere of the pit.

VISIT TO A SECOND PIT.

Another pit was visited, at King Swinsford, belonging to Messrs. Blackwell and Co. Whilst waiting for the ascent of the skip, we heard two miners who were coming up singing a

melodious hymn. The descent was 600 feet. This mine felt warmer than the former one, which was to be expected from its greater depth. Instead of being level as in the former mine, the roads or gateways in this mine were up-hill and down-hill, and, in some places, steeper than Highgate-hill. Horses of course could not be employed in this mine and where the cars had to be drawn up-hill to the foot of the shaft, the jig-chain was employed and was drawn by the steam-engine. Where there was a descent down-hill, the cars were put in motion by their own gravity and were kept from going too fast by a chain wound round a cylinder.

The risings and depressions in this mine were numerous and sudden, and were occasioned by an irruption of basalt, which not only occupies much space and occasions much increased expense in the working, but also deteriorates the coal with which it comes in contact, and renders it more liable to fall into small pieces.

In one part of this pit were lines of sandstone in the ten-yard coal most wonderfully elevated and depressed within short distances.

Towards an elevation in this pit a man was sent forward with the Davy, and two flashes of carburetted hydrogen were seen within it.

VISIT TO THE OPEN MINE NEAR DUDLEY.

There is a place where the bed of the ten-yard coal may be seen, and the endings going on under the open day, about two miles from Dudley, at the north of the Wren's Nest Hill. The coal has been upheaved, so that the top is within about thirty feet of the surface of the ground.

The measures above the coal have for a certain space been cleared away and a great quantity of ironstone has been obtained, but unfortunately it is not of very good quality. A certain quantity of the coal has also been taken out to the whole depth of the stratum and for a frontage of about eighty feet, so that on descending the magnificent mass may be seen exposed to view and the mode of working the same as that carried on down in the deep recesses of the bowels of the earth.

When visited in the beginning of January, 1841, the coals were found to be undermined along the whole of the front and as far back under coal in some cases as forty feet. There were large pillars left standing, some seven feet across, which the miners said were very small and other pillars ten feet across, which they said were called men-of-war. From pillar to pillar might be fifteen feet. In one place the miners counted the subdivisions of this large stratum, being here nine in number and which they called by uncouth names, intelligible only to the miners themselves. The partings were of various thickness, some three inches, and some nine but the same partings varied in thickness in different places. Some masses had been brought down one was pointed out of thirty tons and another of about 170 tons, or as others called it eight boatloads, each boat being nominally of the burden of twenty tons, but in reality twenty-one or twenty-two tons.

A place was pointed out where the *old men* had been at work. By the term old men they meant men of former generations.

When the coal has been sufficiently undermined and it is intended to make a great mass fall down, the miners attack the pillars with prickers, that is with instruments at the end of long handles having a sharp point and at the side a hook or projection, so that the miner may strike with the point and tear away with the hook. After a time the pillar is worked so small that it cracks and yields and down falls a mass of 100 or 150 tons, or even more. As all the top strata were in this open mine carried off it was not necessary to leave pillars permanently and all the coal was capable of being removed and there was no time lost in filling up the gobbing to hollow space from which the coal was taken.

From the open face of this mine a horseway was carried under ground a long way, gradually descending to a place where a shaft was sunk and the skips were hoisted up by the chain from the steam-engine, in the same way as in mines generally. A second shaft was sunk for the sake of ventilation and there were several workings in this under-ground part, exactly the same as in other mines of the South Staffordshire coal-field.

VISIT TO THE WALLBUT PIT.

This pit is situate in the north-east corner of Bilston, on the property of James Loxdale, Esq. On the 29th day of May, 1841, I was induced to go down to inspect it, being told that it was a more curious pit than any in which I had ever been. Arriving on the bank a little before

ten, the men were seen sitting enjoying their pipes. It was stated that they had come up at nine and put on dry clothes and taken their breakfasts and would go down at ten and remain till one, when they would again come up, put on dry clothes, dine, and go down again at two. They would leave off before six, and then a night set would take their places. The water was said to have risen in the pit and we were detained nearly an hour until the pumps had reduced it a little. We at last entered the skip and whilst descending saw, as we passed, the ten-yard coal, and much lower down the 'Heathen' coal. The beds at which we arrived at tile depth of eighty-one yards from the top consisted of the New-mine coal and Fire-clay coal, which here came very near to each other, there being only a thin parting between them, so that both seams might be worked at once.

The first step from the skip went above the ankle in water and wet coal-dust and the second step was like the first. It was of no use then to be on ceremony and we advanced forward. The water in one place was nearly knee deep, and through this part we went on a carriage with a skip drawn by a horse. The water everywhere fell from the roof in great drops like the shower of a thunderstorm, out of the roof of the gateways. The horses had wax cloths spread over them to protect them a little from the rain. The water sometimes fell in spouts. It was stated that all this was merely the drainage of the water which had accumulated for ages in the coal and in the measures above it and that in four or five months, by the time the gateways were completed, the mine would be thoroughly drained, and would be easily kept dry and comfortable with very little pumping. The horses were obedient,-the men and boys seemed very cheerful. The holers lay on their sides, with the water covering their lower thighs. There was not a murmur of complaint. There was a long gateway of some hundred yards in length and other roads coming off at right angles from it, from one to the other of which, airways were drawn which formed the means of ventilation.

In one part the miners had met with a hard rock, a species of trap. They had powdered through it; that is, they had gradually worn it to powder, as it was too hard to yield to any force of the hammer. What was very agreeable, the coal on the other side of the fault was on the same level, the trap having entered in without having caused any dislocation of the beds of coal.

In one place the gas bubbled up through the water and when a candle was held to it there was a flash.

The horse-road was about eight feet across and eight feet high and there a railway laid down.

One of the most remarkable things in this pit was the cheerfulness with which men and boys proceeded with their work, seemingly unconscious of there being any hardship in it. Certainly the miners are a set of brave men. It is true they had the consolation of thinking that when the mine was once drained they would have a most agreeable place to work in, and would be able to make good wages.

OF THE IRONSTONE MINES.

There are many beds of ironstone interspersed amongst the beds of coal and the beds of sandstone and indurated clay and shale which make up the coal-measures. Some of these beds of ironstone consist of pulverised matter, with rounded boulders of ironstone distributed through it, whilst other beds consist of a thin band of clay-stone, containing iron and sometimes there is a band of such stone usually of from two to five inches, then a thick band of eighteen inches to two feet clay, without iron; below which is another of similar clay-stone, containing iron. There are also beds containing flattened spheroids called balls, very like in form to the flattened spheroids of cement-stone in the cliffs of the Isle of Sheppey, and in like manner having many fissures filled up with carbonate of lime.

Near Dudley there is no bed of ironstone of sufficient importance to be worked which lies above the ten-yard coal. There is a bed which is above the Heathen coal and the work people get up through a hole in the measure on the top of the Heathen coal, to this bed. The whole contents of this bed, both the ironstone boulders and the rubbish in which they are contained, are let down into cars which run along the floor of the Heathen coal-bed and these are brought to the foot of the shaft and hoisted up and the contents spread out on the bank where the ironstone boulders are collected from the refuse, in which operation men, women, and boys are engaged.

Other beds are worked lower down.

Near Bilston, the principal ironstone beds are as follows:-

1. Gubbin.
2. New-mine Iron-stone.
3. Fire-clay Balls.
4. Poor Robins.
5. Ball Iron-stone.
6. Blue Flats.
7. Bristol Diamonds.

The ironstone mines always feel less warm to the miners than the coal-mines, although at the same depth below the surface. This arises from there being in most cases much water in the ironstone mines, whereas the coal-mines are usually dry and the workmen also all say that the ironstone is of a colder nature which assertion stated in more scientific language is, that the ironstone is a much greater conductor of heat than coal, and therefore rapidly carries off the surplus heat produced by the candles and the people at work. In two pits of equal depths from the surface, the one of ironstone and the other of coal, which had been long unworked, the two thermometers would probably show the same degree of heat but if work was going on in both of them the thermometer would be higher in the coal-pit and the wet and damp would also make the men feel themselves colder than they otherwise would be.

Altogether the iron-pits are much less agreeable to work in and there is more danger and the work people, from the wet and consequent cold, are liable to rheumatic pains and men get worn out and unable to continue their employment at an earlier age and in the last yeas of life are subject to asthma.

Through the kindness of James Loxdale, Esq., of Bilston and his ground-bailiff, Mr. Grove, who at his request accompanied me, I had all opportunity of exploring the ironstone mine called Bovuerex Mine, near Bilston. The descent was exactly similar to that into a coal-pit. In going down the shaft we saw a bed of coal from two to three feet thick, which was stated to be the Heathen coal. All the rest of the shaft was bricked. After going down about 200 feet we arrived at the mine. There was there sufficient space cut out for men to stand and hook on the skips to the chains. A short way farther on was room for half a dozen people to sit down.

In this pit the working commenced close to the shaft and gradually proceeded backwards from it, there being no danger of the ground falling in and occasioning the expense of a fresh shaft. It became necessary as we advanced to crawl on hands and knees but occasionally the height was sufficient to enable us to crawl on hands and feet, which was easier. One of the gateways was very wet, water dropping down from above and the road being very muddy below. Here and there was space enough at the side of the road to crawl out of the way of the cars, which the boys, all naked above the navel, were urging rapidly forward over the narrow pygmean railway. They laid their hands on the hinder parts of the car and stretched out with their feet far behind, their heads within two feet of the ground. They ferreted onwards urging the cars before them. They were fine youths, and the work displayed the play of the muscles to advantage. This part of the pit was most disagreeable to survey and it was with pleasure therefore that this gateway was left in order to proceed along the next, which was dry, and therefore much less disagreeable. We came at last to where the men were lying on their right sides, and striking with their picks. There was a thin seam, about two inches, of ironstone on the top, and a seam of about the same thickness at the bottom. The intermediate measure between the top and the bottom necessarily had to be removed, but only the top and bottom were of use to be taken up the shaft and the stone of the intermediate measure as far as possible was built up behind the miners to support the roof of the mine.

The miners will sometimes find themselves in great difficulty when at their work they see danger of part of the roof falling and they will move backwards a little and lying on their sides will light their pipes, and hold a council together for a quarter of an hour as to the best mode of proceeding to effect their purpose with least danger. It is, however, a most dangerous trade, let them use what precautions they may.

We returned back to the place at the foot of the shaft and rested there some time before coming up. Several of the miners sat down and their conversation was about the dangers of their occupation, the deaths and broken bones and the early age at which a man was reduced in strength so as no longer to be able to follow his trade, which was estimated to he about 42. Meanwhile many boys with their loaded cars passed us and went off again after having delivered their cargo. An artist could find no better place to improve his taste, or select models of the perfection of the masculine form in severe exertion. The youngest of the boys was from 12 to 13. The pay of a boy of 14 is about 14s. a-week.

Besides the ore produced in their own country the iron-masters in South Staffordshire purchase a red ore brought from Lancashire and Cumberland of the description called Hematite, which is a carbonate of iron. It is exceedingly rich, and is said to contain 55 per cent of iron. It flows very easily but requires delicate management to prevent it from sticking to the bottom of

the furnace. It is usually smelted mixed with other ore. The small iron-masters find this ore some protection against the persons who work iron-pits, from whom they buy their ironstone, and who are disposed sometimes to attempt to raise their prices beyond what the iron-masters consider reasonable.

OF THE CHILDREN AND YOUNG PERSONS.

I now proceed to report respecting the children and young persons under 12 several heads as laid down in the Instructions to the Sub-Commissioners.

I. - OF THE AGE AND NUMBER.

Children in South Staffordshire are sent to work in the coal-field at an early age, some at seven or eight, and at all ages after. The returns obtained from the ministers of religion afford overwhelming evidence of this fact. Some are removed from school even to be sent into the mines still earlier. Many of the witnesses confirm this state of things. Mr. Cooper, a surgeon at Bilston, who has much practice amongst colliers, has given evidence as follows:-

At what age do the children go to work in the collieries?

> Some as early as seven or eight; many have met with accidents before eight. In the very small collieries, where a man without a capital is endeavouring to get on, and cannot afford the proper means of working his pit, little children are sent into holes in the mines with baskets to get coals to bring them to the foot of the shaft and they drag them along on their hands and knees. Some are apprenticed as early as nine years of age (No.3).

. Mr. William Grove, mine-agent to James Loxdale, Esq., of Bilston, states that,

> He went to work when he was six years and a half old and was employed to carry picks to be repaired. He continued at this work about a year and a half, and then went down into the pit.

Mr. William Hartell Baylis, agent of the same James Loxdale, Esq., has been in the management of mines 30 years. He states that,

> The boys begin work at seven years of age, and drive the horses which work the gin, and have about 2s. 6d. a-week. In about two years after they go down into the pit (No.7).

In the ironstone-pits the work is laborious, and very young children would be of little or no use.

According to Mr. Baylis,

> The proportion of men to boys in the iron-stone pits is 100 to 70. In the coal-pits the proportion is 100 to 30" (No.7).

No sufficient data are in existence to give an estimate of the proportion between the number of people in the ironstone pits and in the coal-pits, but the usual supposition is that the men and boys in the ironstone pits are about one-third as many as the men and boys together in the coal-pits. Many of the ironstone pits are low and there horses cannot be employed, which is the reason of there being so large a proportion of boys in comparison with the men to push the skips or carriages to the foot of the shaft.

II.-OF THE HOURS OF WORK.

The usual hours of working in the pits are twelve, being from six in the morning to six at night. (Baylis, No.7.) The hours are about the same in all districts in Staffordshire and the neighbouring counties. In the returns which have been received the hours of labour are uniformly twelve, but the time for meals is to be deducted.

III. - OF MEALS.

The only regular time for meals in the coal pits of South Staffordshire is an hour for dinner, generally from one to two. A little before one the wives of the men may be seen approaching the pits with their husbands' dinners bound up in handkerchiefs, which are put into a skip and sent down the shaft. No particular time is allowed for breakfast and the men and boys must take an opportunity as they can, so as not to interrupt the work. The engine stops working from one to two, but not at any other time. The assemblage at dinner is in a large dining-hall cut out of the coal and is the most lively, uproarious, and jovial that I have ever seen. A quart of ale is then given to the men and a pint to the boys. It is called pit beer and the masters and butties say it is a clear wholesome beverage made from malt and hops but the work people complain grievously of it for want of strength.

The people after two o'clock go back to their work and at six the time is up, they ascend the shaft in parties at a time and find a warm fire in the hovel built at the top near the shaft. They seat themselves and partake of their allowance of beer, which is a quart for each.

IV. - OF THE NATURE OF THE EMPLOYMENT.

There is a great variety of work in the pit and on the bank. I shall endeavour to describe one by one the several descriptions of work-people.

Of the Holers.

The holers are the same class of men which is called hewers in the northern coal-field and is the most important in the pits, being employed at work requiring the greatest strength and skill. Most of them are full-grown men but many young men begin to use the pick at 15, 16, and 17, and therefore are within the range of the present inquiry. It is also that condition to which all the children and young persons aspire at last to reach.

Throughout the greater part of the district of South Staffordshire, the principal bed of coals is the ten-yard coal, so called from its depth, which exceeds that of any other bed in the kingdom. Strictly speaking, it is composed of 10 or 12 seams, lying over each other, with very thin partings of very unequal thickness at different places between them. Occasionally the depth is not quite 10 yards, and sometimes the depth is 15, 16, or 17 yards, but only for very short spaces.

The miner who attacks it lays himself on his side and holding his pick in both hands strikes against it with all his force, throwing all the weight of his body into the blow and brings out the coals. A day's work of a pickman is one yard six inches in front and two yards inwards, and two feet high.

The pickman may undergo as far back as 16 or 18 yards and they leave little pillars on which the coals are supported.

. They cut away coals on the sides so as to separate that which has been undergone from the rest and then also they cut away what they can at the back. The pillars are then worked off by prickers at the end of very long rods and at last a cracking is heard and the miners run off as fast as they can and happy are they if all escape unhurt by the fall of the coals.

When the lower part of the ten-yard coal is got out, it becomes necessary to erect scaffolding to get up to the coals which still adhere above. By cutting away at the sides and at the back these coals are got down.

Gunpowder is much in use to facilitate their proceedings.

Very young persons may be trusted to undergo who are not sufficiently skilled the use of the pick to cut down the sides.

The holers often get a day's work done in eight hours, but in some pits it may be 12 hours. Often they can get so many coals down that they are able to take a holiday, if so inclined, without any hindrance to the other people employed.

In the pits where the seam of coals are only a few feet in thickness, the principle of working is much the same. The coals are undergone and there are cuttings made on each side and gunpowder or wedges are used to force the coal down. A much less quantity is brought down at a time than in the ten-yard coal.

There are many Welsh miners in the South Staffordshire coal district. They are described as living more closely, in less comfortable accommodations, than the English and being less

fond of social enjoyment. The Irish miners enjoy the reputation of greater courage than prudence, and of being ready to go into dangerous mines from which other miners have recoiled and this valour has sometimes cost them dear. At King Swinford it was stated that four miners were brought from West Bromwich to go into a mine which others would not enter. They went down the shaft singing merrily, and boldly went forward with candles, without first sending forward the Davy. An explosion took place, and they were dreadfully scorched. At Bilston it was stated that three Irishmen ventured by themselves into a dangerous mine and it exploded. Two of them were found burnt to death, and the other was found sitting with his hand on his head, having been suffocated by the foul air which fills a mine after all explosion and is considered more dangerous than the explosion itself.

The wages in the mines are kept high, and will generally be so, from the difficulty of obtaining a supply of labour. Only persons of strong constitutions are fit and there are many who consider the work disagreeable. But chief of all it is the danger of broken bones and death which deters competition. Hence boys in Dudley, Wolverhampton, Bilston, and other towns, are working in certain branches of manufacture at one-half and one-third, what boys of the same age are earning in the mines.

There are branches of trade exceedingly unwholesome, - such as brass casting, where the fumes of the zinc are excessively noxious and where men become old long before the proper time, in which wages are given equal to or greater than the wages in the collieries.

Of the Gin-drivers.

A gin is erected where the mine is only very small and the occupier is unwilling to he at the expense of a steam-engine, and at this spot the boy with the whip keeps the horse going round and round. Frequently he has a hovel with a good fire at the side of the horse-track, where he often stands and pelts the horse with small stones or coals to keep him going whilst he is warming himself. It is a very good healthy exercise in the open air. When there is not a hovel this employment is very disagreeable in wet weather. Girls frequently drive the horse in the gin.

Boys on the Bank.

One of the employments of a boy on the bank is to assist in emptying the skips after they are brought up. The skip is drawn up a little above the level of the ground. The slide is then pushed forward over the mouth of the pit and the engine-man lets the skip down upon it and it is then rolled forward on wheels and emptied of its coals. An empty skip is hooked on, and the slide is withdrawn to let it go down. The boy on the bank may also have to go to the blacksmith with picks which are sent up the shaft to be mended. A little boy of seven or eight may carry half a dozen of picks and as he gets stronger he can carry a dozen or more.

The boy on the bank may be put to many anomalous employments. At West Bromwich a boy stated that one part of his work was to go with a donkey cart twice a-day a mile distance to fetch beer and he always took with him in the cart 4 cwt. of coals to leave at the house of one or other of the colliers.

The boy said he was made to do anything he could and was never allowed to be idle.

The employment on the banks near the mouth of the shaft is dangerous to men, boys, and girls, and many accidents have occurred.

Of the Air-door Boys.

The air which comes into the pit from the down shaft must be forced round the workings and roads of the pit to the up shaft, in order to supply fresh air for breathing to the people and horses and to carry off the noxious gases, carbonic acid gas or chokedamp, and the carburreted hydrogen gas or firedamp.

It may be necessary, however, for men and horses to go along a road through which the current may not be allowed to pass and for that reason a door is placed there which may be opened so long as is required and must as soon as possible be shut again. Where there are two doors in the line of communication the opening of one of them will not produce a draught.

The air-door boys open these doors and close them as soon as they can. They must be constantly at their post, and attentive to their duties.

Young Men.

When a youth arrives at 16 or 17, he becomes what is called a young man, and is employed at any kind of work which the butties choose to give him to do. If he hole with the pick, which is the best paid work, he obtains the usual wages for the work but he may also be set to load the skips and he may be employed on the bank to receive the skips and empty them on a waggon and then to push the waggon away. Ultimately a young man is allowed to take to holing altogether, as soon as his juniors come on to do the miscellaneous work at which he has occasionally been engaged.

Of the Fillers.

The fillers are young men employed to fill the skips with coal. After the holers have undergone the coal the hollers crawl in and push out the large pieces of coal and bring them and place them in the skips to be pitched or arranged by the boys called the pitchers, leaving the small coal or dirt to be taken .away by boys. The holers gradually undermine further and further back, and it may be as far as 16 or 17 yards, the space between the floor and the coal above them being little more than will admit their bodies and the fillers come after them and remove the large coal. When a large mass of coals has been undermined and the pillars upon which it stood have been worn down and taken away by the prickers and in consequence a great mass of several hundred tons falls down, then the fillers have much active employment. As there is nothing left to support the roof it may be expected before long to fall down and therefore the fillers, and pitchers, and drivers, must exert themselves and it may even be necessary to form two sets to work night and day, to get the coals removed to the bank as early as possible. The fall of the roof might cause the loss of the coals and might endanger life and limb.

Boys who carry back the Slack.

After the young men have carried away the large coal to out it on the skips, there are little boys who crawl on to rake the small coal and coal dust into baskets and then carry the baskets backwards, and throw their contents into the gobbing, or now empty space from which the coals have been taken. When a great mass of coals has been brought down and the large coals have been put into skips, the boys carry back the slack which is left to the gob, in the same way as already stated. These boys are employed also in cleaning the air-ways and there are instances of their driving the horse.

Of the Pitchers.

The coals are obtained in very large masses, and a boy is quite unable to load the skips in the pit. Young persons are employed for this purpose but boys are found exceedingly useful in pitching the coals in the skips, that is, in balancing them or adjusting them so as to build up a load and in placing the broad iron rings or girdles about them.

Of the Pushers.

There are boys in the pits where the seams of coal are too shallow to enable the horses to go up to the workings who push the carriages from the workings to the horseways, or to the foot of the shafts.

. There are also boys in the iron pits, which are generally very shallow, who push the carriages with ironstone to the foot of the shafts. Some of these boys are as young as from 10 to 11 and there are some as old as from 17 to 18.

Of the Drivers.

The boys and young persons who drive the horses in the pits bring the skips from the workings where the coals are brought down, or if it be in beds which are too shallow to allow the horses to come up to the workings, they bring the skips from a point in the horse-road to which they are brought by the pushers.

There are candles all along the horse-roads to afford light and the horse-boys of the Staffordshire mines, walking naked from the middle upwards at the horses heads, present models equal to the best of the Grecian sculpture.

The youngest of the drivers are from 10 to 11, and some are from 17 to 18.

Of the Employment of Girls.

On the banks of the canals in Staffordshire are seen many girls engaged in loading the boats with coals. These girls are substantially, though coarsely, clothed, and the head and neck more particularly protected from the cold. The work is laborious but not beyond their strength.

The clothing is obviously such that a girl cannot continue to wear it after going home. She therefore lays it aside and washes herself and puts on more agreeable clothing for the rest of the day. The coarseness of the clothing, which prevents it being worn after work is over, is an advantage and the girl, when she has changed her dress, feels herself her taste revived for the rest of the day.

Many girls are employed under the designation of bankswomen. They stand on the bank near the mouth of the shaft and when a skip comes up and the slide is thrust forward, and the skip is let down upon it, they unhook it and push it forward, they then empty out the coals. They also swing an empty skip to the chain and when the slide is withdrawn it is let down the shaft.

The returns from Staffordshire, in some of the tabular forms issued by the Board, show the wages of girls to be as follow:-

Age	s.	d.		s.	d.
12 to 13	4	0	to	4	6
13 „ 14	4	6		5	0
14 „ 15	5	0		6	6
15 , 16	6	0		7	6
16 „ 17	7	0		8	6
17 „ 18	7	6		9	0

Many girls are employed on the banks of the ironstone pits, in picking out the ironstone boulders from the measures in which they are contained.

There are some persons who object to girls being employed in out-door and what is supposed to be laborious, employment, but when we consider how many employments men have engrossed to themselves and how few ways there are for women to gain their living, we must be cautious not to attempt to narrow what is already so limited. As to the laboriousness of their occupations, the young women are best able to judge for themselves and they are able to show that they possess a physical vigour far surpassing that of the young women brought up in the close air of great towns.

The girls are generally singing at their work, and always appear smiling and cheerful.

V. - THE STATE OF THE PLACE OF WORK

This, in the Staffordshire coal-mines, to persons who have been accustomed to it, is very comfortable. The coal-beds are sufficiently thick to allow abundance of room. The mines are warm and dry. There is a supply of fresh air from ventilation, though less than there easily might be. In conversation with miners, in the whole course of inquiry as to the state of the mines, I never heard a single complaint.

The ironstone mines are often wet, and the medical witnesses say that this sometimes causes glandular swellings and scrofulous diseases. Asthma and rheumatism are also not unfrequently produced (Fereday, Baylis, No.2, 7.)

The pits are usually of the temperature of a fine summer's day, or, as one of the witnesses expressed, 'it is warm, beautifully warm.' Horses thrive well and cats breed in the pits; mice and rats abound in all parts. Crickets are chirping everywhere and there are gnats, forty-legs, and beetles. The miners in the pit are not exposed to close overheated air as in some manufactories and in winter escape the miseries of cold, rain, snow, and frost. However unpleasant the coal-pits may be to persons who for the first time go down to see them, to those who are used to them they are exceedingly agreeable.

VI. - OF THE ACCIDENTS IN COAL AND IRON MINES.

. The accidents which occur in the mining district of South Staffordshire are numerous and to judge from the conversation which one constantly hears, we might consider the whole population as engaged in a campaign.

(1.) A miner may fall down a shaft of a pit in work, or he may fall into the shaft of a pit now abandoned. Generally a wall is built round the mouth of the shaft of an abandoned pit but more frequently it is arched over but sometimes the wall has fallen down, or the bricks have been stolen and sometimes also openings are made by the ground-sinking and persons wandering out of the high road at night incur great danger, the eyes being deceived from the light of the blazing furnaces and the burning coal-heaps and burning slack and shale.

One proprietor stated to me that he had laid out as much as £50 in building domes to shut up his old pits but that he had failed in his object by the people carrying the bricks away and so well aware were all persons that he had done all in his power and that he was no way to blame for any accidents which occurred, that no one had ever once come to him to ask him to contribute towards the expenses of the funeral of any person who had fallen in and been killed.

(2.) When going down the shaft to their work something may fall upon them.

(3.) The chain may break, and miners going down or coming up may fall to the bottom and be dashed to pieces. Cases have occurred where diabolical characters have deranged the gear during the night and it has not been observed; and in consequence the party first descending in the morning have been dashed to pieces. John Fenn (No.32), a constable at Wolverhampton. gave evidence of such having been the case, but that he had not heard of such a thing in that neighbourhood lately.

(4.) When within the pit a lump of coal or of stone may fall from the roof and prove fatal. This is more particularly likely to occur in the bed of the ten-yard coal, from the great force which a small body may acquire in descending from that height. There is great diversity as to the hardness or softness of the roofs of pits.

(5.) When the miners come up the shaft it has occurred that the persons on the bank do not attend to the engine in time and the miners are carried up and precipitated over the pulley and dashed to the ground and killed. In every such case the negligent parties ought to be sent to the assizes.

(6.) The men employed in undergoing a mass of coal, and the men and boys carrying away the coal, may be crashed by its unexpectedly falling upon them.

(7.) A miner may be suffocated by carbonic acid gas, or as they express it, may be damped to death.

(8.) Explosions of carburetted hydrogen gas, which is usually called by the miners sulphur, sometimes prove very destructive, not only by scorching to death, but by the suffocation of foul air after the explosion is over, and also by the violence by which persons are driven before it, or are smothered by the ruins thrown down upon them.

(9.) A miner may be drowned from water breaking in over old workings.

There are often accidents, such as a miner falling and hurting himself, or meeting with injury from the horses and cars.

Altogether the narratives of calamities in the mines are most appalling until a person has become accustomed to hear them. No doubt in the telling there is no diminution of the truth, but unhappily the returns of the Registrar General and a Parliamentary Report prove that calamities in mines are both numerous and disastrous.

The miners are so accustomed to these accidents that they have at all times every thing in readiness which the surgeon will require them to provide on his arrival and he never, as in the case of other patients, has to wait until things are sent for. Happily for the miners their constitutions are so good, that injuries, which in the case of the artisans of towns would be fatal, are cured in a space of time and with an ease which to surgeons in any other districts would appear almost miraculous.

As so many accidents occur in mines, in order to provide a fund for defraying the expense of medical aid and to make some provision for the people when kept from work, there is in almost every field a society called the Field-Club, the funds for which are raised by a contribution from the wages, of about 3d. a-week, and not so much from boys. The people working in the ironstone pits pay 4d. a-week on account of greater liability to sickness. Not unfrequently the owner acts as treasurer, and the money is deducted from the men's wages and carried to account. A surgeon is engaged at an annual salary, and he is bound to attend to all the field cases, that is, to accidents in the fields and subsequent illness occasioned by accidents but if it be any ordinary illness not arising from the field, his contract does not extend to it. The club also allows to the man during his illness and convalescence a sum of from 6s. to 8s. a-week. Boys have not so large an allowance.

Benefit societies in general object to miners on account of the danger of their occupation, and accordingly they form benefit societies amongst themselves.

Deaths by Violence.

The Registrar General having in his last or Second General Report given an analysis of the causes of death for the year 1838, and there appearing to be an unusual proportion of deaths by violence for the mining district of South Staffordshire, application was made for an account giving the particulars of each case, which was kindly supplied. From that account the following analysis was made out under several general heads:-

Deaths by Clothes taking Fire.

Aldridge—ages 5, 56, 74	3
Bilston—ages 2, 4, 4, 4, 5, 6, 76, 77	8
Darlaston—ages 3, 13	2
Dudley—ages 2, 4, 4, 6, 7, 56, 74	7
Rowley Regis—4, 6	2
Sedgley—ages 1, 4, 4, 4, 5, 5, 5, 5, 7, 9, 11, 14, 18, 59	14
Tipton—ages 2, 3, 4, 4, 5, 6, 7, 9, 88	9
Walsall—ages 3, 4, 5, 7, 10	5
Wednesbury—ages 3, 3, 3, 5, 68	5
West Bromwich—ages 2, 3, 3, 4, 4, 11, 63, 79	8
Willenhall—ages 3, 4, 21	3
Wolverhampton—ages 2, 2, 3, 3, 4, 4, 4, 4, 5, 6, 6, 16, 76, 83	15
	81

61 not exceeding 10 years of age and 20 above that age.

These accidents occurred chiefly in dwelling-houses, but some also in shops brewbouses, hovels, on the pit-banks, coke hearths, furnaces, and brick kilns.

Deaths by Burning.

Bilston—aged 64	1
Dudley—aged 2	1
Oldbury—particulars not given, 2 of them 17	7
Sedgley—falling into the ashes, aged 1	1
Walsall—left in a dwelling-house, aged 3	1
Wednesbury—burnt in the chin, aged 3	1
West Bromwich—aged 52	1
	13

Deaths by Scalding.

Darlaston—aged 3	1
Dudley—with tea, age not stated	1
„ falling into a cistern of boiling water, age not stated	1
„ falling into hot water, aged 2	1
Sedgley—by falling into a pot of boiling water, aged 3	1
Tipton—by falling into a cooler of boiling wort, aged 3	1
Wednesbury—falling into a boiler, aged 8	1
West Bromwich—hot tea thrown over his body, aged 3	1
„ falling into a well of hot water from a steam-engine, aged 10.	1
„ falling into a cooler of boiling wort, aged 4	1
Wolverhampton—particulars not given	1
„ another by falling into a pot of hot water, aged 4	1
	12

Deaths by Drowning.

Bilston—falling into a brook, aged 1	1
„ a man dragging a net in the canal, aged 22	1
Darlaston—ages 6, 26	2
Dudley—ages 7, 13, 40	3
Oldbury—falling into a well, aged 2	1
Rowley Regis—falling into a bucket of water, aged 1	1
„ falling into a draw well, aged 64	1
Sedgley—particulars not given	1
Tipton—ages 4, 5, 39, 55, and one not stated	5
Wednesbury—aged 18	1
West Bromwich—ages 2, 3, 3, 11, 49	5
Willenhall—aged 60	1
Wolverhampton—ages 55, 55	2
	52

Deaths by Accidents about the Shafts of the Coal Pits.

Aldridge—falling from a skip while ascending, aged 21	1
Bilston—falling down the shaft, in consequence of the breaking of one of the tackling chains of the skip, aged 45.	1
„ drawn over the coal-pit pulley, aged 30	1
„ by a plank falling down a shaft, aged 24	1
„ falling from a skip, ages 12, 17	2
Carried forward	6

Brought forward . .	6
Bilston—falling down a shaft whilst ascending, and clinging to the pit chain, aged 19.	1
,, falling down a shaft, aged 19	1
,, falling down whilst flying a kite in an old coal-pit field, aged 9.	1
Bloxwich—falling down a shaft on leaping from a skip, aged 17 .	1
Darlaston—falling out of a skip, aged 49	1
,, falling down a shaft, aged 9	1
Dudley—falling down a shaft, aged 45	1
,, by skip and rope falling down a shaft on a man at work, aged 44.	1
Oldbury—falling out of a skip, aged 29	1
Rowley Regis—falling down the shaft of a pit, aged 23	1
Sedgley—falling down the shaft, ages 14, 29	2
,, falling down the shaft of an old coal-pit, ages 8, 9 . .	2
,, falling down a shaft containing water, and being drowned, aged 45.	1
,, falling down the shaft with a loaded skip, aged 10 . .	1
Tipton—falling into a shaft containing water, and being drowned, aged 23.	1
,, killed by a piece of coal falling down a shaft, aged 21 .	1
,, falling from a skip whilst ascending and clinging to it, aged 15.	1
West Bromwich—falling down a shaft, aged 40	1
Wolverhampton—falling down a shaft, aged 20	1
,, falling down a coal-pit shaft containing water, aged 34.	1
	28

Deaths by the falling of Coals, Clod, and Rubbish in the Coal Pits.

Bilston—ages 13, 20, 40	3
Dudley—ages 13, 18, 20, 21, 22, 27, 28	7
Oldbury—ages 15, 18, 25, 35	4
Rowley Regis—ages 12, 13, 22, 30, 30, 47, 56	7
Sedgley—ages 11, 21, 30, 34, 47, 55, 66	7
Tipton—ages 14, 21, 26, 36	4
Wednesbury—ages 15, 21, 30, 40	4
,, of earth and rubbish, aged 19	1
West Bromwich—ages 11, 14, 18, 19, 19, 20, 24, 24, 25	9
Wolverhampton—ages 9, 12, 20, 30, 35, 50, 53, 60	8
	54

Other Deaths in Coal Pits.

Darlaston—hurt in a pit, aged 20	1
Dudley—injuries, ages 17, 26	2
,, found dead in a coal-pit, aged 41	1
Rowley Regis—fractured skull, aged 10	1
Sedgley—drowned by influx of water, aged 30	1
Tipton—fall in a coal-pit, aged 9	1
,, hurt in a coal-pit, ages 24, 47, 54	3
,, drowned by influx of water, aged 21	1
	11

Deaths by Explosions of Gas or Fire Damp.

Bilston—ages 18, 26	2
Darlaston—ages 50, 55	2
Tipton—ages 11, 13	2
Wednesbury—aged 27	1
West Bromwich—aged 22	1
	8

Deaths by Suffocation from Noxious Gas, Carbonic Acid Gas, Choke Damp, or Sulphur.

Bilston—suffocation from calcined ironstone, aged 36	1
Oldbury—aged 21	1
Sedgley—ages 16, 42	2
West Bromwich—aged 25	1
	5

In addition to the deaths by violence above given, there are also eases of murder, homicides, suicides, accidents from horses, waggons and gigs, falling down from ladders and from other causes, which do not call for any particular observations as connected with the inquiries of the present Commission.

The preceding Deaths enumerated in Three Classes; 1st, of age not exceeding 13; of age 13, and not exceeding 18; and above 18, will be as follows:—

	Not exceeding 13.	13, and not exceeding 18.	Above 18.
Clothes taking fire	65	2	14
Burning (5 ages not stated)	4	2	2
Scalding (3 ages not stated)	9	..	..
Drowning (2 ages not stated)	12	1	10
About the shafts of coal-pits	6	4	18
Falling of clod, coal, &c.	8	7	39
Other deaths in coal-pits	2	1	8
Explosion of gas	2	1	5
Suffocation from noxious gas	..	1	4
About ironstone-pits	1	4	6
Iron-works	3	..	7
Lime-works	2	1	4

The preceding list of premature deaths under circumstances of excruciating pain is very appalling.

If we consider the great number of very young children who miserably perish by their clothes taking fire, or who fall into vessels of boiling water, or into wells, we see the result of the poor mothers going from home to work, and leaving their infants in charge of a little girl who would require some one to look after herself. But when we read of infants being scalded to death by tea being thrown over them, we cannot avoid suspecting that in such instances the primary cause has been strong beer. In this district, where there is a blazing fire in every cottage, accidents from setting clothes on fire must be very likely to happen, and we must regret that the children are not clothed in garments made of wool instead of the flimsy combustible cotton.

In the case of the accidents from falling down shafts of coal-pits and of ironstone pits, the proprietors or lessees are greatly to blame. We find some falling down the shafts of old pits and are crushed to death, or drowned in the water at the bottom. One playful boy, of nine years of age, is flying a kite in an old coal-pit field and falls to the bottom and is killed. All these accidents might be prevented by enclosing the mouths of the pits with durable materials. When wood is employed it is liable to be carried off, and at all events it soon rots away. It is not uncommon to see a remnant of a brick fence but very frequently quite inadequate for its purpose. A strong turf fence would answer as well and would not afford any temptation for people to carry it piecemeal away.

In regard to the top of the shafts of pits which are actually at work, they must be left sufficiently clear of all incumbrance which would impede labour but even these might be partially enclosed and at all events by such a barrier as would not allow persons to approach without being reminded of their danger. A stranger coming into a coal-field is on his guard but persons always at work in the field are apt to become less cautious. Such was probably the case with the bankswoman, aged 17, in the parish of Willenhall, and the bankswoman, aged 19, in the parish of Bilston, who both perished by falling into ironstone pits.

Happily, in 1838, there was no instance of the rope or chain breaking, and g being precipitated to the bottom. But there the people ascending or descending was an instance of the chain of a skip breaking and a miner, aged 45, being killed. Several fell out of the skips and were killed. There does not appear to be any sufficient control over the people as to the number going down or up at a time, or such accidents would be of much rarer occurrence. The ages of the persons who fell out of the skips were 9, 12, 15, 17, 17, 21, 29, and 45.

Some deaths were occasioned by lumps of coal or pieces of wood falling down the shaft upon the people. It is not the custom in this district to use an iron umbrella to protect the persons ascending or descending from such accidents.

Of the deaths in the coal-pits by the falling of coals or stone from the roof, explosions of

gas, suffocation, or other accidents, altogether 78 in number in 1838, there were 2 of nine years of age, 1 of ten, 3 of eleven, 2 of twelve, 4 of thirteen, 2 of fourteen, 2 of fifteen, and 1 of sixteen.

Young and old are equally exposed, but the young have less strength of resistance.

There are several casualties from falling down the shafts of ironstone pits but only five and all these of grown persons, by the falling of the ironstone, or of the clod of the roof. There are several casualties in the iron-works, amongst which is that of a boy, aged 10, drawn between the cog-wheels of a steam-engine.

The casualties of the lime-works are, one boy, aged eight, killed by the fall of stone, and another, aged six, drowned in a pit of water in a quarry.

Since I have explored other districts, I have formed a decided opinion that the accidents in Staffordshire might be diminished by the following means:-

(1.) A more powerful system of ventilation, which would more completely clear off the carburetted hydrogen gas and the carbonic acid gas and would also improve the health by carrying off the foul air occasioned by the breathing of men and horses, and animal effluvia.

(2.) By stronger and more complete tackling for ascending and descending and by a protection of a canopy or iron umbrella over the heads of the people.

(3.) By a rigorous discipline as to the number of men or of boys allowed to go up or down at a time.

(4.) By being careful to select a steady man to work the engine, and being strict to enforce attention to his duty.

(5.) By more effectually shutting up old pits and also by erecting some sort of enclosure round the pits at work, so as to put persons on their guard who approach them.

(6.) By an examination of the state of the pits every morning before the men went down to work. Also by an examination of the condition of the whole tackling and gear by which they descend.

VII. - OF HOLIDAYS.

147. Mr. Grove, mine-agent to James Loxdale, Esq., gives the following evidence:-

Once a fortnight there is a holiday and in some mines there is a holiday once a-week. It is on reckoning Monday. The men are paid on the Saturday and many of them are drunk on the Monday and that is a holiday and sometimes some of the men in consequence of the Monday's drinking are unable to work on Tuesday and then the boys claim it as a holiday. If there should be any slackness in the iron trade, then the people will not be employed their full time. Work ceases sooner than the usual time on the Saturdays. There are wakes or parochial festivals in the several parishes of this district, and of course nobody works at such times (No.5).

VIII. - OF HIRING AND WAGES.

In a preceding part of this Report an account is given of the butties and of their hiring the workpeople. This includes also the boys, with the exception of those who open and shut doors, who are paid by the coal-master.

The wages are high compared with other labour.

Mr. Grove (No.5), when six years and a half old got 2s. 6d. a-week; at eight he got 3s.6 6d. a-week. At ten a lad got 1s. 3d. a-day. At twelve a lad got from 1s. 6d. to 2s. a-day.

Mr. Baylis (No 7) states that the wages are of late years higher than formerly. A boy from nine to twelve, who some years ago got 6s a-week, gets 9s. a-week and boys of twelve who are strong and able to take the pick in hand get 13s. or 14s. a-week. In the ironstone mines the wages are still higher. A boy from eight to nine years old gets from 9s. to 12s. a-week, from nine to twelve gets 12s. and more; older and stronger boys of course get paid better still.

. The boys and young men who load the skips are paid about as follows:-

Age.	s.	d.
13 to 14 . . .	12	0

14 „ 15	13	0
15 „ 16	13	6
16 „ 17	14	6
17 „ 18	14	6

The wages of the pitchers are about as follows:-

Age.	s. d.	s. d.
8 to 9	5 0	
9 „ 10	5 0 to 6	0
10 „ 11	6 0	
12 11	7 0	
11 „ 12	7 0	
13 „ 14 „ 15	7 6 to 8	6

The wages of the pushers are about as follows:-

Age.			s.	d.	
9	to	10	4	0	to 5s.
10	„	11	7	6	
11	„	12	8	4	
12	„	13	9	4	
13		14	10	9	
14	„	15	11	4	
15	,~	16	12	3	
16	„	17	13	6	
17	„	18	15	0	

The wages of the drivers are about as follows :-

Age.			s.	d.
10	to	11	5	0
11	„	12	7	6
12	„	13	8	0
13	„	14	9	0
14	„	15	10	6
15		16;	12	0
16		17	13	6
17	„	18	14	0

IX. - OF THE TREATMENT AND CARE.

That the children and young people are treated kindly may be considered to be sufficiently proved by the absence of all complaint. They are in great demand, and are able to do many things which could not be done by grown men on account of their size and therefore no parent would allow his child to go to work here there was harsh treatment. The children and young people always appear cheerful and contented with everything, excepting with the beer given to them by the butties against which there appears to be an universal complaint.

There is one class of children and young persons totally in the power of the butties, the apprentices and here arbitrary power has its usual effects. Kind and conscientious men use their power discreetly, bat there are men of a different character who use their apprentices badly. This is a subject deserving thorough examination, and therefore I now propose to go fully into it.

Under this head I shall introduce an account of a class of children and young persons exceedingly numerous in Staffordshire.

OF APPRENTICES.

Many boys and young men are working in the mines as apprentices. Such is the demand for children amongst the butties, that there are almost no boys in the union workhouses at

Walsall, Wolverhampton, Dudley, and Stourbridge; and there is no schoolmaster at any of these establishments. According to the evidence of all the witnesses examined, the boys are sent on trial between the ages of eight and nine, and at nine they are bound as apprentices for 12 years, being to the age of ~l years complete. There is nothing whatever to learn, though no doubt practice may produce an increased dexterity. Even in the mines of Cornwall, where a great degree of skill and judgement is required, there are no apprentices ; but in the coal-mines of Staffordshire the term is twelve years complete. The apprentices are well fed, lodged, and clothed. On these points there is not much complaint and it is also usual to give 6d. a-week as pocket-money but until the age of 21 the unfortunate orphan whom necessity has driven into a workhouse is made to work in the mines for the benefit of another. At the age of l4 he works side by side with other lads who are getting 14s. a-week; at 17 or 18 he is working side by side with free-men who may go wherever they please, and are earning 20s. or 25s. a-week; and year after year must he toil for the benefit of another. On making inquiry of the clerk of the union at Walsall (No.31) and of the relieving officer at Wolverhampton, what reasons ;there could be for such a long term of years, the reply was that it was a gain to the masters. The same reason is given by Mr. Grove (No.5). No doubt so they think, but other parties besides the butties who work the mines share in the profit. If the butties get cheap labour they can afford to dig the coals or ironstone at a cheaper rate, and thereby the tenants of the main benefit; but by how much the cheaper they can raise coal and ironstone, the larger royally they can afford to pay, and thereby the proprietors gain. Hence all parties are interested, and the pauper children suffer. It is easy in reply to such observations say that the apprentices are well treated. In many cases it may be so, and the instances of exceedingly gross ill us age may be rare but all this, and more than this, was said by the planters respecting the slaves in the West Indies but still the country would not be satisfied and put an end to slavery in the colonies. Now here is a slavery in the middle of England as reprehensible as ever was the slavery in the West Indies, which justice and humanity alike demand should not longer be endured.

Mr. Grove gives the following evidence:-

> 'In general the masters would not use the lads ill nor allow others to do so. The masters have a very good feeling towards them. After the work they go home to their masters' houses, and are very well treated. They have good working clothes, good flannels, good shoes. Boys now are so independent, they would go out of the country if they were put out the least thing in the world. They have 6d. a-week pocket-money, or, if the reckoning day be only once a-fortnight, they have is and a treat of ale. Sometimes the men give them some money. They have too much money altogether. The boys are merry, cheerful, up to all sorts of games. They bellow horribly and sometimes fight. The lodging is good, quite as good as that of the master's own family. When I first became a butty I had 13 men and six boys and I have had 24 men and ten boys. The boys are liable to accidents but not more so than others. Sometimes the apprentices are forced to go where other boys would not go. Now most boys are so independent that they will not go (No.5).'

Respecting the apprentices, Mr. Baylis, agent to James Loxdale, Esq., has given the following evidence:-

> 'The butties take apprentices, sometimes five or six. These live in their master's house and he behaves well towards them. They are allowed about 6d. a-week pocket-money. Some masters take care of them on Sundays to make them properly observe that day, but others do not. In consequence many do not go to school nor to public worship (No.7).
>
> They are, however, take them all in all, a happy well-treated race. There are some exceptions, but not many. In general they are a happy race.
>
> The working of the mines brings on asthma. Working in the cold and wet often brings on rheumatism. More suffer from this than from any other complaint. Accidents are often met with. The men will send a boy where they do not go themselves and some have their limbs broken and others lose their lives. The men send them under the hole to fetch the slack. There is a greater proportion of accidents among boys than amongst men.
>
> It is now difficult to get these boys. The mother will come and say to the butty, '*If you will not give him so much I will take him somewhere else;*' and boys who formerly got 6s. now get us.
>
> Some parishes will not let the butties have their pauper children as apprentices. Boys in other trades will work for 1s. 6d. to 2s. a-week (No. 7).'

The Rev. H. S. Fletcher, incumbent of Bilston, says:-

> 'I might observe, that if anything could be done by which, in case of apprentices, negligent masters could be made to do their duty towards their apprentices, it might be desirable. Instances

sometimes occur when a master takes a parish apprentice and because his rightful protectors are either at a distance or decline further interference, neglects his duty to a serious degree.

The condition of the apprentice is unfavourable to the acquisition of industrious habits. The young man toils for the benefit of others, and not of himself. It is also most unfavourable for the acquisition of a virtuous, moral and religious education. No doubt there are some, and it is to be hoped not a few, virtuous and conscientious masters, who train up their apprentices as they would train their own children, but very often it is otherwise. In the case of the greater part of mankind, natural affection aids conscience in the discharge of duty towards their offspring, and, however negligent of their own religious duties, they carefully see to their performance by their families but the apprentice is not a subject of natural affection; if, like the ox, he be strong for labour, it is all that the master cares for.

The apprentices have not a holiday if there be the means of employing them, as the butties must keep them at all events, and have not to pay them wages. Even if "the bank day," that is, if the people on the bank do not draw up coals, still the apprentices are sent down into the pits to carry back slack into the gob, or to do other odd work.

It is the apprentices who are set to mind the steam-engines and pump up water on Sundays.

It is the apprentices who on that day clean the boilers.

The following conversation which actually took place between. two parties, who may be called A and B, will give a general view of the merits of this subject:-

A. I hope that you have found cause to be pleased with the people of Staffordshire?

B. Very much so. The miners are a brave, industrious, energetic race, and their open, manly, honest countenances entitle them to every degree of respect.

A I hope you find their condition satisfactory?

B. Until the blowing out of so many furnaces was talked of, their general condition was before that of the people of most other districts. There are, however, some things connected with this district sadly to be deplored.

A. What can any of these be?

B. Your system of apprenticeship, by which your butties go not only to the Union workhouses of your own district, but of all the surrounding counties, and bring with them unfortunate orphan boys, and keep them in slavery for 13 years in your pits.

A. They cannot be bound until nine years of age?

B. No, they cannot be bound till nine, but a lad may be sent at an earlier age into the pits on trial, as it is called, and then as soon as he is nine years of age, the indenture is signed, and he is from that time a slave for 12 years, condemned to work without any pay or reward for your butties in the pits.

A. But he is learning his trade as other apprentices do, and at 21 will get good wages.

B. It is no trade at all, though working at the coals may produce increased dexterity. The poor lad works side by side of lads of the same age as himself, 16, 17, 18, 19, 20, to 21 years, who have never been apprentices, and they earn every week as many shillings as they are years old perhaps, or even more. There is he, poor lad, toiling at the same work, exposed to the same dangers, and all he is to look for is perhaps a shilling at the end of the fortnight as pocket-money. This is literally slavery. These young men give the labour of their bodies to others, and get nothing for it, and that is slavery, if slavery there be.

A. But they are well fed and clothed.

B. No doubt they have nourishing food. No doubt the Virginia planter takes care to feed his slaves, as much as he does to feed his horses; and he is anxious that they do not impair their health and strength by want of clothes, or exposure to the weather. The clothes of the apprentices protect them from the cold, but that is all in most cases that can be said of them.

A. But if the butty were not to get the benefit of their labour when they grow up, what motive would he have for taking them when they are so young?

B. The butties are at no outlay on account of the apprentices. Even from the first the weekly wages of a lad of the same age with an apprentice are more than enough to keep him and by the time that he is 16 he could board and lodge and have a large surplus to spare.

A. If the apprentices were not under the firm hand and authority of their masters they could not be kept in order.

B. For every apprentice in the pit there are two or more of the same age who are not apprentices, and the same authority which controls them could control those who are now apprentices. Their mutual necessities bring the butties and the young men together; and the necessity of eating and drinking makes the young men do their duty, that they may be entitled to their money, and so it would act on those who are now apprentices. In fact, being free men they would more readily acquire a habit of self-control and be better instead of worse members of society.

A. If we had not apprentices we should not have the labour necessary to work our pits. Our butties

go into all the neighbouring counties and get them when they can, though some Unions now refuse to let us have them.

B. You have no difficulty now in obtaining the labour of two-thirds of your young men, by the honest expedient of paying for it and if you will only be equally honest towards the other third, and pay for it, you will have no more difficulty there. All the other coal districts fairly buy the labour which they employ. In the district of Durham and Northumberland, in the pits of which is a far larger number of young men than with you, there are no apprentices. Their hiring with young and old is from year to year. In the district of Ashby de la Zouch there are no apprentices. In Warwickshire there are no apprentices. In Shropshire there are no apprentices. In all the districts immediately around you the coal-masters will not allow the slavery of apprenticeship. Yet into these very districts your butties go, and seek out poor orphan boys who have none to protect them, and these they carry off from their own country, and they send them into their pits, and for year after year till they are 21 years of age do they make them toil, and rob them of the reward of their labour. It is worse than the African slavery and how a man who feels that he is accountable to his Maker and must hereafter answer for the deeds done in the body, whether they be good or whether they be evil, can perpetuate such oppression as this, is inconceivable. Whoever has been told of this apprenticeship of Staffordshire has expressed indignation, and the same feeling which has knocked the chains off the African will soon bid the enslaved of Staffordshire go free.

A If so, the butties will not be able to get the coals at the present price, and trade will be injured. A butty gets five or six of those lads, who work for him for nothing, and the country is benefited by the moderate rate at which he can afford to bring to the bank the produce of the mines.

B. That remark reaches the bottom of the whole question. The butty gets the labour without paying for it; the coal-master participates in the profit by getting his coal and ironstone at a cheaper rate; and the coal-master thereby can afford a better royalty or rent to the proprietor; and all this at the expense of the poor orphan lads. But the country is too just to permit such cruelty, and if you require the labour of these young men you will have to pay for it.

X. - OF THE PHYSICAL CONDITION.

Whoever has seen the boys, young persons, and the miners working in the mines naked from the waist upwards, or has seen them in the same state assembled at dinner, can never after doubt of their fine physical condition. Whatever impression may be thus made is more than confirmed by the evidence of every competent witness of whom he makes inquiry. If the boys and young persons were in bad physical condition it would be impossible that the men could enjoy good health or be strong and vigorous. Evidence respecting the whole population as far as physical condition is concerned must therefore apply to persons in those years which are more particularly the subject of our inquiry.

Of the state of health of the miners, all the witnesses have been unanimous in describing it as most excellent, and better than that of other men. In proof of this being the case, Mr. Fereday (No.2), of Dudley, refers to the benefit societies consisting of miners and the benefit societies of men of other trades and he has found a much less rate of sickness in the former than in the latter. This is attributed to the colliers spending their days in a warm equable temperature and to their substantial living. Mr. Cooper (No.3), a surgeon in Bilston, says of the colliers -

> "They are more healthy than the men who follow other occupations. From my experience for five years at the Birmingham hospital I know that the colliers are much more healthy than the men of Birmingham. Compound fractures of limbs will turn out very well here, which is not frequently the case in Birmingham. A broken leg will heal much sooner and there is much less risk of permanent injury from and severe accident. When any operation is performed the patient is much sooner got well."

Of their wives he says, "They bear illness very well, and are in general very healthy. They suffer less than most women from child-bearing" (No.3).

Of their families he says, 'They are in general very healthy. The chief evil which they have to endure is that, when very young, their mothers injure them by quackery, and give opiates, such as Godfrey's Cordial, which is a mixture of treacle and opium. Many deaths are caused by quack medicines. Medical men seldom see the children until they are benumbed and stupefied with opiates." (No.3).

Mr. Fereday supports Mr. Cooper as to the facility with which a collier recovers from an accident:- "In cases which would be fatal in London and the patients would sink under them, the colliers think nothing of them, and quickly get well. It is, however, to be lamented that accidents very often happen. I have known the children of the colliers, who had a fracture of

thigh, to be able to be down and go about in a month." (No.2).

There is a disease which affects the miners and which is chiefly remarkable from causing a black expectoration. It is described in his evidence by Mr. Cooper. This gentleman also showed me a description of it in a French work, which I have extracted (No.3), as being exceedingly curious. The miners who work in the ironstone mines are not so healthy as the colliers. Mr. Fereday says, "They are subject to glandular diseases, and the very least injury from a hammer will produce tumours in the part hurt which will be difficult of healing. The stone-pits are much subject to water, and the men and boys working in the water suffer from that cause, and are subject to scrofulous complaints; but in the dry mines such is not the case, and the colliers working in them enjoy good health." (No.2).

The persons who work in the ironstone mines become asthmatic in their old age.

Mr. Cooper states that the diseases of miners are all of a very simple character, and are the diseases of nosologists, such as are described in books and the treatment is simple accordingly (No.3).

Notwithstanding the external appearances of health of the people actually employed in the mines, there are facts which will prevent us from considering this country as being very salubrious.

No one who has ever passed between Birmingham and Wolverhampton during the night ever can forget that scene. The blazing fires on every side, from the coal burning upon the ground in the process of conversion into coke, the blazing fields of bituminous shale and indurated clay, the flames proceeding from the chimneys of the great towers of the iron-furnaces, present an impressive and even awful prospect, to which nothing usually seen by mortal eyes can be compared.

Even in the daytime the scene is very remarkable. Innumerable tall, round, hollow columns, from the summits of which issue clouds of dense smoke, with the flame and smoke from the tops of furnaces, and flames of fire on the round create a sensation of surprise mixed with dread.

On entering on the dense part of South Staffordshire it is found to be less fearful than at first anticipated. We do not perceive the dense smoke near to us, although it may be but at a little distance on each side. It is, therefore, like mist, everywhere visible a short way off but none visible close at hand; or we may compare it to London, over which, when at a short distance, we see, even in summer, a huge dark canopy of clouds of smoke but, when we enter the streets, all appears clear.

Numerous as are the chimneys for the furnaces, for the steam-engines giving motion to the machinery of the iron-works and for raising the coals and iron from the pits, and immense the quantity of, smoke, yet the vegetable world maintains its productive power. There are good crops of grass and even of wheat, although the heads look very black long before the time of harvest.

The appearance of the people indicates no want of health. The men appear strong, and the women of fine form and blooming fresh countenance. The wives of the colliers are seen returning home, and giving demonstration of strength from the load of coals each is seen bearing on her head.

All this is favourable but, on referring to the registration of deaths, we find that in the mining districts of Staffordshire and Shropshire there is a larger proportion of deaths of children under three years of age than in any other district in England, Manchester and Salford only excepted, being, in 10,000 deaths of males of all ages, not less than 4671 under three and of 10,000 deaths of females of all ages, not less than 4572 under three.

We are compelled to infer that the country, or the manner of treating children, is decidedly unfavourable to infant life. The children of strong constitution only survive and hence the same appearance as is observed by voyagers who visit savage tribes, they seem all strong and of vigorous constitution. It is so, for the feeble died in infancy.

The Registrar--General bas divided England and Wales into 25 divisions, of which the 17th comprehends the mining districts of Staffordshire and Shropshire. From his Second Report is made up the following table, illustrative of the subject now under consideration:-

TABLE showing the proportion of Deaths in 100,000 Males, arising from Old Age and Violence, in the 25 Districts into which England and Wales have been divided for the purposes of Registration; also showing the Deaths in 10,000 of Males and Females under 3 Years of Age.

—	In 100,000 Deaths there are		Out of 10,000 Deaths of Males there are	Out of 10,000 Deaths of Females there are
	From Old Age.	From Violence.	Under 3 Years.	Under 3 Years.
1. Metropolis	6,357	3,546	3,511	3,247
2. Manchester and Salford	4,495	5,068	4,962	4,556
3. Liverpool and West Derby	4,041	4,229	4,468	4,276
4. Leeds	6,410	4,273	4,616	4,343
5. Birmingham	6,074	2,865	4,396	4,408
6. Middlesex (part of), Herts, Beds, and Bucks	12,642	3,812	3,304	2,927
7. Kent, Surrey (part of), Sussex, Berks, and Hants	11,798	4,767	2,930	2,564
8. Dorset and Wilts	12,262	4,889	3,096	2,531
9. Devon	11,461	6,038	3,109	2,830
10. Cornwall	8,950	8,322	3,517	3,408
11. Somerset	11,319	6,103	3,341	2,916
12. Essex	13,146	3,348	3,049	2,711
13. Norfolk and Suffolk	13,561	4,674	3,297	2,692
14. Lincoln (part of), Huntingdon, and Cambridge	10,910	5,069	3,929	3,294
15. Lincoln (part of), Derby, Notts, Leicester, and Northampton	12,304	5,046	3,655	3,086
16. Oxon, Gloucester, Worcester (part of), Warwick (part of)	10,766	5,463	3,387	3,005
17. Mining parts of Stafford, Salop, and Worcester	6,668	10,489	4,671	4,572
18. Stafford (part of), Salop (part of), Cheshire	10,332	6,000	3,548	3,098
19. Lancashire (part of)	7,443	5,724	4,594	4,057
20. Yorkshire (part of)	9,584	5,005	4,314	3,886
21. Yorkshire (part of)	11,341	4,801	3,588	3,368
22. Yorkshire (part of), Durham (part of)	14,514	5,992	3,030	2,611
23. Durham and Northumberland (mining part of)	9,712	6,683	3,695	3,298
42. Lancashire (part of), Westmoreland, Cumberland, Northumberland (part of)	13,602	7,647	2,702	2,345
25. Wales, with Monmouth and Hereford	10,724	5,393	3,176	2,978
All England and Wales	9,637	5,107	3,632	3,438

The contrast between the 17th District and the one preceding and the one following, both as to deaths by old age and by violence, is most striking.

From the above extract it appears that the district most destructive of infant life is Manchester, Salford, and suburbs, where, out of 10,000 deaths of males, 4962, or about one-half, are under three years of age and, of deaths of 10,000 females, 4556. The next is the mining district in question, where the proportion on 10,000 males is 4671, and females 4572. Next comes Birmingham, in which, out of 10,000 deaths of males, are 4616 under three and of the same number of deaths of females are 4349 under three years of age.

XI. - OF THE MORAL CONDITION OF THE CHILDREN.

Whilst the physical condition and treatment of the boys are so satisfactory, it is to be lamented that as to the moral condition it is in some respects quite the reverse. They are sent at so early an age to the coal-field, to the iron-mines and to other labour, that it is scarcely possible for them to obtain anything deserving the name of education at the few day-schools existing in the district. There are, indeed, in most places Sunday-schools and much praise is due to the gentlemen who establish them and still more to those who render their own personal services in teaching in them. The Sunday-school has the merit of bringing the children together, before Divine service, and securing their attendance in church or chapel and a few of the pupils may learn to read but that is all that a Sunday-school can effect in Staffordshire or anywhere else. Evening-schools have been established at Bliston and some others, to which the children may be sent but it is considered a doubtful experiment. The children, who come home fatigued from the

mines, get drowsy by the fire, and feel reluctant to go out.

With a view to obtain correct information as to the state of education, circulars were issued by the Board to the ministers of religion, both of the Established Church and of other denominations and many returned full particulars.

To begin with Bilston, the first in alphabetical order and in the centre of the collieries and iron-works and which may be considered the type of the whole district.

In Bilston there are two infant-schools and there are four other day-schools for children of the working classes, and for the convenience of the youth who are engaged at work during the day there are two evening-schools which give instruction from seven to half-past eight and there is a large evening-school attached to the church of St. Mary's District, in which instruction is given from half-past six to eight.

There are also Sunday-schools attached to every place of worship, - to the Established Church, to the Wesleyan, Independent, Baptist, Roman Catholic, New Connection, and Ranting chapels.

In the district of St. Mary's there is a Sunday-school attached to the church for 600 children, with an average attendance of 450 and one connected with the Romish chapel, with an attendance of 50 children.

For girls there is a day-school, where reading and needlework are taught. There is a school connected with the Independents in which a few girls are admitted. A British school was attempted, but did not succeed.

There is also a school for 300 girls in the district of St. Mary's, where needlework and other domestic work is taught; and there is another school of the same description connected with one of the chapels.

At first sight this seems an abundant provision for education; and considering that it is set on foot and supported by voluntary contribution, it is exceedingly honourable to the Christian benevolence of the people of Bilston and the more so as there are very few persons of fortune residing there, and by far the largest portion of the population c6nsists of working people. Yet, when we take into consideration that the population in 1831 was 14,492, and now supposed to be about 20,000, we at once see that four day-schools in addition to the infant-schools can be but a mere fraction of what would be necessary if all the children of a suitable age were to receive education. But the fact is that the most part of the children are at work in the iron-mines, coal-mines, iron-works and the workshops in the town and only a few of them are sent to endeavour to learn something at the three evening-schools which have lately been established.

The branches of education taught are reading, writing, and arithmetic and, in the Sunday-schools, reading and the elementary knowledge of religion.

In the other towns and large villages of this district we find abundant room for praise of the Christian liberality of the benevolent in establishing schools for the children of the working people. In very many places there are national schools, sometimes two in one place and sometimes also a British school. There are also infant-schools but there are exceedingly few day-schools carried on by individuals on their own account and altogether, however creditable the general view is to the ministers of religion and their benevolent congregations, the provision for instruction falls far short of what would be necessary for the children of such a large and dense population. Everywhere are Sunday-schools attached to the churches and the chapels of all denominations, and any place of worship which omitted to establish a Sunday-school would suffer in the number of its attendants,

The education is the same as in schools at Bilston. In the female branches of the national and British schools girls are taught needlework.

The masters and mistresses of the national and British schools are in most instances described as persons qualified for their offices but some are not so much qualified as might be desired. But it is illiberal and unfair to be too critical on this head. The funds of the two great societies which establish these schools are utterly insufficient to enable the committees of management to instruct. a sufficient number of teachers, or to retain such as endeavour to acquire a scientific knowledge of their profession anything like a sufficient length of time. This they themselves state and lament. Local committees must therefore be content with the best teachers which they can find but it is to be hoped that before long a larger supply of better qualified teachers may be obtained.

In the Sunday-schools the teachers of both sexes perform a labour of love, for which the rising generation cannot be too grateful to them. The qualifications necessarily must vary with the description of persons belonging to the several congregations.

As to the ages at which children are removed from school to be sent to work, there is a variety of statements, no doubt depending on the circumstances of the several localities. In

some places it is stated to be from 8 to 9 and from 8 to 12. In other places it is from 9 to 12. But there are also places in which it is stated that children are sent to labour at a much earlier age. At Bilston the answer is 7 and some under; at Burslem 6, 7, and 8; at Dudley from 5 to 6; and at Stourbridge 6, 7, 8, 9, and 10; at West Bromwich 6 to 12; at Wednesbury 7 to 8; from Great Bridge the answer is 'as soon as they are able, without any regard to learning', and the answer from Brierly Hill is 10 and many boys much under. From the whole of the evidence it appears that many children are sent to labour long before they can by possibility obtain anything like a sufficient education.

To the query, whether the removal from school at the ages specified in the answers proved injurious in future life, the answers are unanimous that the children were sufferers in regard to their education in being prevented from acquiring a sufficiency, and often losing what little they bad acquired. Some of the answers specify the inconvenience of being unable to read and write or to enter into business.

Some of the answers describe the early removal from school and sending the children to labour as having an injurious moral effect, by exposing them to the society of older boys already initiated in vice; by rendering the children too soon independent, and thereby disobedient to their parents; as preventing mental improvement and thereby driving them to sensual gratification for enjoyment.

In respect of the effect on the physical condition of the children there is a difference of opinion, some thinking that their physical condition is not injured, and most thinking otherwise. The latter say that their being sent early to labour stops the growth; that the labour is more than the constitution will bear; that the confinement of 12 hours a-day injures the health, and that premature old age is the result.

In respect to those who labour in towns, these physical injuries, it is to be eared, too often show themselves but not so in the mines. If the boys be not assessed of sound strength and courageous spirit they will not do to go down into the mines at all and they look remarkably well, as far as can be judged through the thick coal-dust with which their faces are veiled and exceedingly well when cleaned on Sundays.

In reply to the query, up to what age children ought to be allowed to remain at school, most of the ministers of religion mention 12, 13, and 14; some more generally 12 to 14. One gentleman (Rev. William Gordon, of West Bromwich) says, '*Perhaps 14, but that can never be. If there is plenty of work, they cannot be spared, if none, they have not the heart to come starving and badly dressed to school.* Rev. Thomas Hardy, a Wesleyan minister, of Dudley Road, Tipton, expresses doubt of the possibility of keeping children at school so long as desirable, by saying, '*Up to 10, if practicable.*' The Rev. Mr. Fletcher, of the Established Church, Bilston, seems to feel the great difficulty which there will be in this district in retaining children at school so long as desirable but thinks '*a great benefit be effected if poor children remained at school till they were 10 years of age.*'

I entirely concur with those gentlemen who think that it is extremely desirable that children should remain at school until from 12 to 14; but at the same time, when I consider the poverty of the parents and the scarcity of boy labour in this district, and that it is indispensable in the iron-mines and thin-bed coal-mines, for work which could not possibly be done by grown persons, I fear that it would not be practicable to restrain boys of from 10 to 14 from going down into the mines. But if children could be kept at school till 10, which appears perfectly practicable, it would not impede the labour of the mines, and would do the children the greatest good.

In reply to the query, Do you consider the Sunday-schools or other means of instruction at present accessible to children employed in labour sufficient to make up for the loss of instruction by early removal from the day-schools? there is one unanimous opinion, some saying '*Certainly not*,' others saying '*Decidedly not*,' and others, '*By no means*'.

Some gentlemen enter more into particulars and, whilst giving due praise to the Sunday-schools as a great blessing, ascribe their insufficiency to make up for, the loss of instruction in day-schools to the small number of hours in which instruction is given; also to the want of discipline and the system being necessarily confined to teaching reading and the elementary parts of religion and not including writing and arithmetic.

Some of the gentlemen also state that a great number of children do not attend the Sunday-schools. The Rev. Mr. Parker, of Coseley, says, '*There is no provision for one-fourth of the uninstructed youth.*' The Rev. John Bulmer, of Rugeley, says, '*In many places there are no Sunday-schools.*' The Rev. William Lewis, the vicar of Sedgeley, says that, '*In consequence of the confinement of the children in the above mentioned occupations, relaxation on the Sunday and in evenings is very grateful to them, and it is found generally to be a very difficult*

thing to get them to attend at Sunday-schools or at evening-schools.' The Rev. Alexander Paterson, of Stourbridge, says, '*It is a fact that by far the greater number of children who are employed in labour do not attend Sunday-schools*.' The Rev. J. A Mason, the Roman Catholic minister of Stourbridge, says, '*The children can scarcely be got to school before 9 o'clock a.m. At half-past 10 the public worship generally begins. Again they cannot be at school before 2 p.m. and often, as it my chapel, the service begins at 3 o'clock*.' The Rev. George Marsland and the Rev. Robert Leake, of West Bromwich, state, '*The greater part of the children: on going to labour, neglect the Sunday-school altogether*.'

As to the progress made by children who are unemployed in labour and are able to attend day-schools, as compared with that of the children who are able only to attend night-schools and Sun day-schools, the whole of the reverend gentlemen bear evidence to the immense superiority of the former. At Bilston, the Rev Mr. Fletcher says, '*They will not bear comparison*', and the Rev. Mr. Owen of the same place, says that the difference is so marked that, on hearing the children read, he '*could distinguish which belonged to the one class and which to the other*.' This is certainly no more than was to be expected and how it is possible that it could be otherwise?

. Several of the ministers of religion append to their answers to the queries issued by the Board on the subject of education, which are too voluminous for publication in full, general remarks respecting their several localities, or the district generally. Amongst others:-

Bilston. - The Rev. Mr. Fletcher, of the Established Church, says:-

I am not aware that anything further need be added to the answers above, unless it be to state more decidedly my full conviction of the necessity of poor children remaining longer at school. I think no complaint can be made, generally speaking, of the treatment of children as regards their living, or their labour being too severe. The appearance of the children would, I think, contradict such complaint.

The Rev. Josh. B. Owen, Incumbent of St. Mary's, Bilston, says:-

I trust, upon the whole, the system of daily, Sunday, and evening schools goes far towards remedying the evil of the children's early removal but only in such cases where the children, actually losing the daily instruction, seek both the night and Sunday school to compensate the greater loss.

Bloxwich. - The Rev. John Bailey, the Incumbent, says:-

The instruction afforded the children, though its apparent fruits are but partial, yet, generally speaking, the religious and moral improvement of the children of the district is as good as can be expected; but it is quite clear that more schools are wanted, and means to support them by endowment or otherwise, so as to induce better qualified teachers to undertake them.

Brierley Hill. - Rev. John Parsons:-

An evening-school, for the benefit of those children engaged in the different works, would be very desirable, the majority of them being lamentably ignorant and few, comparatively, able to read.

Cannock. - Rev. Daniel Griffiths:-

At Wrylay Bank, one and a half miles from Cannock, is an excellent infant-school, conveniently situated for 100 children, but the average is only 40 and many parents care so little about their children's education, that they will not send them to what they call the Natural school. The boys at the collieries generally go down into the pits as soon as they can work to any purpose, but I do not think they are ill used.

Hales Owen. - The Rev. R. B. Hone, of the Established Church:-

I believe there is less demoralisation where children are employed in small workshops, as here in nailing than where they are congregated in large numbers. But, alas! demoralisation is great here. Although there are no large manufactories here, employment is found for children at a very early age. My parishioners are all nailers, and the children begin to work in little smithies, one of which is usually attached to each cottage, with their parents girls at about 11 years old and boys at 9 or 10. Often the children and parents quarrel and then the children go out into lodgings and are independent. This happens as early as 15 or 16 years of age. The workshops are often not confined

to one family.

Stourbridge. - Rev. J. A. Mason, Roman Catholic Minister:-

I am afraid, from the shortness of time spent in school on a Sunday, little benefit is derived and I am sorry to say that, from the general corruption of youth, scarcely any of the boys who have bud the advantage of being many years in my school and gave evidence while there of good dispositions, have retained them long after their removal. Most of them soon become corrupted. There are some notable exceptions, of course, but they are exceptions, not the rule.

Every congregation of boys, or of boys and girls mixed, from the nail-shops to the banks of the coal-pits and furnaces and from these to the larger manufactories, is more or less a nursery of vice; generally the masters or overlookers care for little but the quantum of work done and where the master is a good man and perhaps a father, yet in spite of him vice will creep in. This shows the necessity of youth being well fortified before being put to work.

Stourbridge. - Rev. Alexander Paterson

The means of affording instruction are very inadequate to the number of children and besides, the number of children who attend Sunday-schools derive no other instruction and consequently are very imperfectly educated. It is to be lamented that the majority of those who have attended day-schools do not join in after-life any religious society.

Tipton Green. - Rev. Thomas Hardy:-

Their education and condition are far from what they ought to be in a Christian country.

Wednesbury. - Rev. Thomas Eastwood:-

I am happy to say that most if the children taught in the Wesleyan schools are moral and several of the elder are religious. But there many children that labour who attend no school at all, nor any place of worship, and are consequently both rude and wicked.

West Bromwich. - Rev. J. C. Gallaway, M.A.:-

I cannot express the gratification which the appointment of the Children's Employment Commission gives me. It is a measure greatly needed. Too early employment and its necessary attendant of the neglect of all intellectual and moral culture, are producing the most distressing and alarming results. The general welfare, not merely of the children themselves, but of the whole community, demands the decided interference of the Legislature. I believe that it is in most cases poverty that induces parents to send their children to work so soon but if manufacturers, &c., were forbidden by law to employ children under a certain age, they would be constrained to offer to the adult higher wages, and thus the parents would be entitled, as I doubt not they are inclined, to send their unemployed children to school.

Wolverhampton. - Rev. S. Webb and Rev. W. J. Skidmore:-

Education, in the intervals of labour, is not likely to be very beneficial; nor will the mental or physical condition of the children be much improved until their earlier days are entirely devoted to instruction.

Great pains are taken to suppress the vice of common swearing. In all the rules of benefit societies and lodges which I have read, there is uniformly a law against swearing at their meetings, whether for business, religion, or social enjoyment.

On this subject the following evidence was given:-

Sometimes there is swearing; but if the butty hear the swearing or anybody tell him, he keeps off the beer from the offender but it is all drunk by the others. The men all agree to this rule, and it is strictly enforced. If a man swear in any part of the pit, the religious men will tell of him, and he loses his beer for that day.

In some pits a strict observance of religion is carried much further. Mr. Edward Oakley states:-

There is a great deal of religion here. There are pits in which there are prayer-meetings every day

after dinner and all are obliged to attend, as the butties and the men will not work any who do not. We have had preaching down in the pits. That has been the cause of turning many a poor sinner to God and to amendment of their lives. Many a one goes down into the pit to hear the preaching. When there is any prayer or preaching, the master allows five minutes beyond the hour. In most pits there are laws against swearing when the people are in the pit, and the men that swear lose their beer. There is very little public breaking of the Sabbath. The policemen are very useful, and stop all irregular proceedings (No.8).

I may remark, that similar evidence respecting the benefit derived from the police has been given, without inquiry being made, by witnesses in every colliery district in which I have been.

XII. - OF THE COMPARATIVE CONDITION.

The children employed in the mines in South Staffordshire are in a very far superior condition as regards wages and all the necessaries and comforts of life which wages can procure, to the children in the manufacturing districts. The also obtain far higher wages than children in their own district who are in work shops in the towns, in fact almost three times as much. The wages are in like manner far higher than the wages of persons of the same age in the metropolis. These wages enable the children or their parents to procure for them substantial food, clothing, and other comforts.

Boys in Limestone Mines.

In Lord Dudley's limestone mines are about ten boys, being in some mines one, in others two. The work is not too much for boys to perform, and the only service which they can do is to wait upon the men, and go of errands, such a. taking picks up the shaft and to the blacksmiths to be repaired and bringing them back.

Most of the limestone is used as a flux to the iron but some is burnt into lime for the use of the builders and also to be put on the land.

Of the Nailers at Dudley.

There are very many families at Dudley engaged in the trade of making nails The manner in which the trade is carried on is as follows:- A large manufacturer gives out a certain weight of iron to the nailer, generally the master of a family, to make nails of a certain size and pattern and the man is expected to bring back a certain weight of nails, which is the same as that of the iron delivered, after deducting such loss for the waste in the manufacture, which experience has taught both parties to be fair and equitable. Some years ago when the demand was great and the makers comparatively few, high wages were necessarily given but now it is otherwise, for the nailers are so numerous that oftentimes they cannot obtain work, and the wages consequently are much lower.

Not only the grown members of the family, men and women, are employed but even the children, and some as young as eight years of age. There are nails of a small size, such as the strength of a child is sufficient to fabricate, and nails of many different sizes, so that makers of every age find work to which they can be put.

There is obviously the most striking similarity in the relation of master and workman, between the nail manufacturer in Dudley and the silk manufacturer in Spitalfields. In both cases the master keeps a warehouse and delivers out his materials to the workman, who takes them home to his own house and in both cases the workman endeavours to get employment for the wife and the younger members of his family. I visited several of the nailers' shops at Cornhill, close to Dudley. They are very small places, with a little furnace in the middle and blocks on which to make the nails sufficiently close to it, that the workman has only to turn round to put the end of his rod of iron into the fire. Everywhere I was informed that children began at from eight to nine years of age. At first they are set to work for half an hour or thereabouts and then they are allowed to sit and rest some time, and they are set to work again and thus they are gradually brought to endure the fatigue. It was Saturday morning, and most of the workshops were shut, it being the day of the week when the nailers make up their nails into bagfuls and take them to the warehouse to be weighed when they receive their wages. Many young women and some children were seen carrying bags of nails on their heads. Five or six hours are often spent in this way.

In the outskirts of Dudley a small nailer's shop adjoining to a house affords a better chance of letting it. Where there are more blocks than the nailer wants for himself and family, he allows other persons to work at them, and 6d. a-week was stated to be the usual rental. This is another point of resemblance between the weaver and the nailer.

The liberty which the young women have on Sundays is an advantage over the condition of female servants, which recommends the trade to their choice, not withstanding the severity of the labour.

Mr. Thomas Shorthouse, the Clerk of the Dudley Union says:- '*I consider the nailers to be much worse off than the colliers*.'

The Rev. George Marsland and the Rev. Robert Leake of West Bromwich:- '*We beg leave just to observe that the nail makers of this district need special attention*.'

The Rev. William Lewis, the Vicar of Sedgely, describes the condition of the nailers:-

> Children of both sexes are put at an early age to the manufacturing of nails and screws usually at nine years of age, as it is said they never make good workers unless they begin early. The children who are put to work to make nails are generally under the eye of their parents, though frequently they are put to strangers. These do not assemble in great numbers to work, as the shop will not contain more than six and usually has but four and of these some are grown up persons. I do not consider this a healthy employment, as they commence their work early in the morning and continue late at night, though they are allowed time in the day for meals and recreation.

The Rev. J. A. Mason, of Stourbridge, observes:-

> The state of the poorer classes brings much public evil. 1st. The badness of trade reduces them to the necessity of putting their children to work as early as possible. A father cannot maintain his family without it, and scarcely with it. I speak a lot of a casual badness of trade, but that arising in many branches from the introduction and prevalence of machinery. Take the nail trade for example, which is common in this neighbourhood, by casting and pressing of nails, the poor nailer is deprived of a great extent of work, and depressed in the price of his labour so that when he gets work lie is obliged to bring all hands into employment as soon as possible, an or small nails a little boy can be put to work, and little girls too. A man with a large family therefore finds it necessary to do so, and education, religion, all moral culture, is abandoned to procure the bread which perisheth. - I am aware of the difficulty all governments must have in regulating this state of things but still every possible means should be adopted to secure the nation against the almost universal pauperism of the lower orders, for with poverty they become debased, with debasement they lose that self-respect which becomes the dignity of man and when this is gone they become a prey to every vice to which human nature is liable and ignorant and vicious parents will generally bring up an ignorant and vicious offspring, so that families bearing the name of Christian are little better in condition than the brutes, and as rational agents far more dangerous. Imagining also that they are trampled upon and no man cares for their welfare, they lose all respect for their superiors and the government under which they live and from this state of mind arises a catalogue of evils too numerous for me to mention.

EVIDENCE COLLECTED BY DR. MITCHELL.

SOUTH STAFFORDSHIRE COAL FIELD.

No.1 - Thomas Shorthouse
You are now clerk of the Dudley Union? - Yes.
Have you had much previous experience in the administration of parochial affairs? - Yes for 25 years.
Have you had many applications for relief on account of the families of colliers? - Not so much from colliers as from some other trades. I consider the nailers to be much worse off than the colliers.
Have you many complaints of want from sickness occasioned by the mines? - No we do not. At the same time I must say that there are accidents every day and that many nailers leave widows and families but whilst they live they keep their families well.
Are you aware of the younger members of the colliers' families suffering from being sent an early age to work in the mines? - No I am not, and in general the families of colliers comfortable. The women are strong and hearty. They have always plenty of firing, and you may see them carrying home a cwt. of coals.
The men love to live jovially down in the pits? - Very much so, and they are allowed quarts a day by the butty.
Do they drink the two quarts down below? - No, they take one quart at dinner, and the quart after they come up from the day's work. One man seats himself on a bob and the others gather round him, and he pours two tuts, first one and then another, to every man at first and then only one tut in the round to each man, till the beer is all done, and then they go home merrily.
Do they wash after they get home? - They wash their face and neck and make themselves comfortable.
Altogether you have a very favourable opinion of the condition of the families of colliers? - Very much so.

No.2 - Samuel Day Fereday.
You are surgeon to the Dudley Union? - Yes. I have been so for two years.
Have you had other opportunities of becoming acquainted with the diseases of the children of colliers? - Previously to the last two years I have had 11 years experience of the practice medicine amongst that class of the community.
What have you found to be the general state of health amongst them? - Generally very good. The colliers themselves are in general less subject to diseases than other working men.
What particular proof have you of this fact? - There are benefit societies which contract for so much a head with medical men and the societies which consist of colliers have a much less ratio of sickness than societies consisting of men of other employments.
To what you attribute this circumstance? - The colliers down in the mines enjoy an agreeable equitable temperature, they also live well, which supports their physical vigour. The mines in this district are in general are dry which is a circumstance favourable to health.
What is the general state of the health of the families of the colliers? - Quite as good as that of the families of other persons.
Are there any remarkable exceptions to the general health of the colliers? - Yes, the colliers who work in the ironstone beds are subject to glandular diseases and the very least injury' from a hammer will produce humours in the part hurt which will be difficult of healing. The stone-pits are much subject to water and the men and boys working in the water suffer from that cause and are subject to scrofulous complaints but in the dry mines such is not the case and the colliers working in them enjoy good health.
Are the children who go into the mines at the early age of eight or nine subject to disease from that circumstance? - I have never known it to be so.

Have you known any instances of their constitutions suffering from severe labour at so early an age? - I have never known any. In general, the children are bound apprentices to the butties, and the butties have an interest in taking care of them, as they have the expectation of their labour for future years and the children are well kept.
Have you anything to add to your evidence? - I may state that in the case of accidents it is remarkable how rapidly the colliers recover. In cases which would be fatal in London and the patients would sink under them, the colliers think nothing of them, and quickly get well. It is, however, to be lamented that accidents very often happen. I have known the children of colliers who had a fracture of the thigh able to be down and go about in a month.

No.3 - Richard Spooner Cooper.
You are a member of the Royal College of Surgeons and in practice at Bilston? - Yes.
Have you had extensive means of becoming acquainted with the state of health of the people in this part of the country? - I studied my profession in Birmingham, as well as London and I have been in practice in Bilston for ten years.
Have you had many colliers amongst your patients? - I am the medical attendant to about 26 clubs, having amongst them upwards of 2000 members, all of whom, with the exception of about 100, are connected with the collieries and iron-works. They are more healthy than men who follow other occupations. From my experience for five years at the Birmingham hospital, I know that the colliers are much more healthy than the workmen of Birmingham. Compound fractures of limbs will turn out very well here, which is not frequently the case in Birmingham. A broken leg will heal much sooner, and there is much less risk of permanent injury from any severe accident. When any operation is performed, the patient is much sooner got well.
What do you think of the colliers' wives? - They bear illness very well and are in general very healthy. They suffer less than most women from child-bearing.
What do you think of the children? - They are in general very healthy. The chief evil which they have to endure is, that when very young their mothers injure them by quackery and give opiates such as Godfrey's cordial, which is a mixture of treacle and opium. Man deaths are caused by quack medicines. Medical men seldom see the children until they are benumbed and stupefied with opiates.
At what age do the children go to work in the collieries? - Some as early as seven or eight. Many have met with accidents before eight. In the very small collieries, where a man without capital is endeavouring to get on, and cannot afford the proper means of working his pit, little children are sent into holes in the mines with baskets to get coals to bring to the foot of the shaft and they drag them along on their hands and knees. Some are apprenticed as early as at nine years of age.
Do they suffer from fatigue? - Occasionally they may, but it is very rarely; perhaps I do not see one such case in a year. When labour does not injure their health and constitution, they are far more healthy than the children of the working men in Birmingham.
How are they treated when they are apprenticed? - Very kindly and the butty has an interest in keeping them well, as he looks forward to their labour as a future source of profit to himself and it is to his gain that they should grow up strong and hearty.
How do the colliers behave towards their medical men? - With great civility and the most grateful feeling, which is very different from the conduct of the Birmingham workmen, who pride themselves on so behaving as to express a feeling that they have a right to demand the services of the medical man of their club.
What do you think of the sobriety of the colliers? - They drink a good deal of beer, but not much spirits. At our annual club-feast you will seldom or never see any man with his glass of spirits and water before him but every man will have his beer.
Do they attend church pretty regularly? - Many do, but a large majority of the colliers of Bilston and the neighbouring districts are attached to dissenting chapels.
Are the colliers any way delicate in the choice of good things? - Occasionally very much. They will be amongst the first in the season to go into the market and purchase ducks and green peas, or buy a goose or a young pig. The collier and his wife love to sit down to a luxurious dinner on a Sunday.
There is a disease which is said to occasion black expectoration, can you give any account of it? - Frequently it occurs that colliers appear at the offices of medical man complaining of symptoms of general debility, which appear to arise from inhalation of certain gases in the mines (probably an excess of carbonic). These patients present a pallid appearance, are affected with headache (without febrile symptoms) and constriction of the chest, to which

may be added dark bronchial expectoration and deficient appetite. Gentle aperients, mild stomachics, and rest from labour above ground, restore them in a week or so, and they are perhaps visited at intervals with a relapse, if the state of the atmosphere or ill ventilation of the mine favour the development of deleterious gas.
Have you any other remark to make of their diseases? - Their diseases are all of a very simple character, and are the diseases of Nosologists, such as are described in books, and the treatment is simple accordingly.

ANEMIE.

From the 'Dictionnaire de Médecine,' article 'Anemie,' quoted by Andral in 'Précis d'Anatomie Pathologique,' pp.83, 84, 85. Paris, 1832.

'Tous les ouvriers employés dans une des galeries de la mine de charbon-de-terre d'Auzain tombe rent malades dans l'été de l'an 11, pour la première fois, bien que cette galerie fut déjà depuis longtemps en exploitation. La maladie n'attaquait point les ouvriers employés dans les galeries voisines qui ne différaient sensiblement de la premiere que par une longueur moins considérable, et par une nouvellement un peu plus facile de l'air. Elle débuta sous la forme des coliques violentes, avec météorisme, dejections noires et vertes, auxquelles se joignaient la géne de la respiration les palpitations, et une grande faiblesse. Ces accidents se dissipaient peu-à-peu après une durée de dix à douze jours, et c'était alors que se montraient les symptômes de l'anemie; la face dècolorée prenait une teinte analogue à celle de la cire, que le tems a jaune; les vaisseaux sanguins s'affaqaient au point, qu'aucune veine n'était sensible à la vue ou au toucher dans l'épaisseur de la peau, dans les régions mème où ces vaisseaux sont ordiairement plus manifestes. Aucune ramification papillaire ne paraissait sur les conjonctives occulaires et palpébrales ni sur la membrane muqueuse de la bouche; les pulsations artérielles étaient faibles; et ces divers symptomes persistaient méme au milieu des phénomènes fébriles qui survinrent accidentellement chez quelques sujets. Du reste, ces individus éaient dans une etréme faiblesse; ils se plaignaient d'une grande anxiété; ils offraient un peu d'œdematie au visage, et ils éprouraient des frequentes palpitations, et de l'essoufflement par le moindre exercise; ils avaient des sueurs habituelles, l'appétit était conservé, mais la digestion était imparaite et le dépérissement faisait des progrès continuels. Cet état se prolongeait quelques fois pendant un an, et dans quelques cas ii se terminait par la mort, qui était précédée souvent do la réapparition des premiers symptômes. La longueur et l'opiniàtreté de cette affection enganèrent à consulter la Société de l'Ecole de Médecine stir les moyens à employer pour la combattre. Quatre malades furent conditits à Paris, et placés dans l'hôpital de la faculté. Professeur Hallé fut chargé de diriger leur traîtement. On eut d'abord recours à l'usage d'alimens réparateurs, et aux infusions amères de honblon et de gentiane, an vin antiscorbutique, moyens auxquels on joignit plutôt en manière d'essai que d'après des indications précis les frictions mercurielles. Pendant ce traitement un des malades succomba; à l'overture de son corps on trouva tons les vaisseaux artériels et veineux vide de sang colore, et ne contenant qu'un peu de liquide séreux; l'incision de chaire ne donna lieu à aucun écoulement de sang, si ce n'est qu'à la cuisse, où il en sortit un pen. Cette absence de sang, qui était d'accord avec les phénomènes observés, porta à renoncer aux frictions mercurielles, et à les remplacer par l'usage intérieur du fer (limaille poiphirisée), à la dose d'un gros chaque jour combiné sons la forme d'opiate, avec quciques toniques. Au bout de huit à dix jours on observa déjà une amélioration dans l'état des malades soumis à cette mode de traîtement; quelques veines commençaient à se montrer sons la peau de l'avant bras, les digestions étaient plus régulères l'essouffiement était dinimné. Chacuns des jours les malades montraient, comme une décotiverte, de nonveaux vaisseaux, qu'ils n'avaient pas aperçus la veille; tons les symptômes continuaient à s'améliorer, et le rétablissement de ces individus était complet lorsqu'ils furent renvoyés dans leur pays.'

No.4 - Francis Paul Palmer.
You are a member of the Royal College of Surgeons, and in general practice amongst the people of Bilston and its vicinity? - Yes.

You have probably therefore had opportunity of seeing the peculiarities in the manners of the people and are able to contrast them with other places? - I have necessarily seen much of their manners.

> [The witness here made a statement respecting the great number of bull-dogs kept by the miners and the cruel sports in which they were employed but as the magistrates within the years have suppressed such proceedings, they may be allowed to sink into oblivion.]

What are the amusements now? - Chiefly in the public-houses, drinking beer, and singing and dancing the double shuffle, to the music of the fiddle or hurdy-gurdy. The noise of the shoes is the source of delight in this dance and the hobnails of the colliers afford great advantage. Sometimes in summer they will sit all round the door of the public-house in a great circle all on their hams and every man his bull-dog between his knees and in this they position they drink and smoke.

As you are much connected in your profession with benefit societies, you are perhaps able to give some account of them? - The men here nearly all belong to benefit societies. When a man comes to us we never think of asking him if he belongs to a society, but we ask him at once to what society he belongs. There are field-clubs, which are formed for the relief and cure all accidents which occur in that field. The usual contribution is three pence a week, and that he pays well. Some masters collect the money for the club out of the wages and some do not. There are life-clubs for diseases and bodily infirmities. There are also lodges which are both for diseases and accidents. There is a great indisposition to live on charity. When a member dies, a deputation of twelve of the club walk in procession with staves and crape. On the first Sunday after St. James's day the clubs give money for a sermon, and they have their annual procession round the town in grand pomp on the Monday or Tuesday. At the head of the procession ride on horseback the surgeons of the club, the landlord of the house where they meet, with the president and vice-president. or, if it be a lodge, the noble grand and the vice noble grand and all is conducted with great ceremony. When the club meets to do business there is great formality. The president and vice-president are in their robes of office and there is a regular programme of proceedings. In the case of a lodge. there is a noble grand and vice noble grand, in imitation of the forms of the Freemasons. The women also have clubs, and they have a festival and a procession and a sermon at the church and afterwards a dinner of beef and beer, and they have music and dancing. We have much cause to be pleased with the women. We attend perhaps 300 accouchements in the course of the year and almost always the woman has 10s. 6d. by her, which she has saved up 6d. by 6d., without the knowledge of her husband, which she pays to us. If the husband happen to discover her store it is probably spent at the public-house and the poor woman is unable to replace it, and our attendance becomes a debt and we never expect to be paid for it.

If an accident occur and a person be killed, the men all leave off working for that day, the butty gives amongst them 5s. to drink. They are much given to quackery. They have a great terror of law. There is a Scotch dealer in Birmingham, who sends his people all round the country with muslin goods and shawls. When a collier has contracted a debt which he shows no inclination to discharge, the dealer sends a formal sort of paper to the collier and gets it served upon him as a writ. If this do not produce the money, by and bye comes another paper called a writ of horning and caption, and giving notice of formidable consequences. The collier now becomes alarmed at such proceedings and ceases to be a debtor.

No.5 - William Grove.

Is a mine-agent to James Loxdale, Esq., and is now 35 years of age. He went down into the pits when he was about six years and a half old. He was employed to carry picks be repaired and he had strength enough to be able to carry three of them at a time. He was paid for this labour 2s. 6d. a week. He continued at this about a year and a half and got 3s 6d. at last. He then went down into the pit and got about 4s. a week work or play. He was employed to draw with the girdle under him. There were then no rails or sleepers and he had to draw the coal or stone to the bottom of the shaft. The work was a hundred degrees more slavish than it is now and his sides were often cut many times over. The boys were then kept very much under and if any boy neglected anything then he would have been punished but now they take great liberties and the parents and masters encourage them in it. The work was from six in the morning to six at night. The wages were 6d. a day or 2s. 6d. a week; about ten years of age, 1s. 3d. a day, or more, and, if a sharp lad, might be 1s. 3d. At twelve years of age a lad had from 1s. 6d. to 2s.

working in the coal-pits. There were two boys, one twelve and the other fourteen years of age; the first one had 2s. a day and the other 2s. 6d.

In general the masters would not use the lads ill nor allow others to do so. The masters have a very good feeling towards them. After the work they go home to their masters' houses and are very well treated. They have good working clothes, good flannel, good shoes. Boys now are so independent, they would go out of the country if they were put out of the way the least thing in the world. They have 6d. a week pocket-money; or, if the reckoning-day be only once a fortnight, they have 1s. and a treat of ale. Sometimes the men give them some money. They have too much money altogether.

The boys are merry, cheerful, up to all sorts of games, they bellow horribly and sometimes fight. The lodging is good, quite as good as that of the master's own family. When I first became a butty I had thirteen men and six boys and I have had twenty-four men and ten boys.

The boys are liable to accidents, but not more so than others. Sometimes the apprentices are forced to go where other boys would not go. Now most boys are so independent that they will not go. This has been the case the last four or five years. Better to fall out with the men than to fall out with the boys. The men cannot do the boys' work.

The witness has now 145 pits. He has to go into some of them every day, and has to see the boys every day. It is not easily done now to force boys into dangerous places. There is quite as great a proportion of men hurt as boys. The boys have good eating, drinking and clothing. The boys are not subject to any peculiar disease. They are liable to catch cold like the men. When they come up from their work they find good warm fires in the hovels and warm flannels, as well as the men. The apprentices and the children of the master eat at the same table and have the same usage. Once a fortnight there is a holiday and in some mines there is a holiday once a week. It is on reckoning Monday. The men are paid on the Saturday and many of them are drunk all the Monday and that day is a holiday and sometimes some of the men, in consequence of the Monday's drinking, are unable to work on Tuesday and then the boys claim it as a holiday. There are seven or eight night-schools at Bilston, from seven to half past eight, for three days in the week.

No.6 - William Grove, again examined.

1. You have had an apprentice and have expressed an opinion that apprentices in the collieries of Staffordshire were essentially necessary for the success of the trade; will you state your reasons for so thinking? - n the first place, we have such a call for boys in our workings and if we had not got them bound to us, we should not have them under any sort of government, except from fortnight to fortnight. In the next place, if we were to have boys and they had parents, they would change them from master to master, and encroach, and get twice as much for them as their labour is worth. There are more than 200, probably 300, apprentices belonging to the collieries in this town of Bilston at this moment. One man has five now in his house. Within the last twenty-five years he has had more than 40 apprentices.

2 How may boys, not apprentices, work in the same pit as the apprentices? - More than the apprentices; twice as many.

3 Have you any other reasons to state? - If we had no apprentices, the mines could not be worked at the present expense and the masters would be the sufferers. If there were not apprentices there would not be children enough brought up to the mines to work them.

No.7 - William Hartell Baylis.

Is the agent of James Loxdale, Esq. Has been employed in mines for the last 40 years and has been in the management of mines for 30 years and is well acquainted with the habits of the mining people. The boys begin work at seven years of age and drive the horses which work the gin and have about 2s. 6d. a-week. In about two years after they go down into the pit. They begin work at six o'clock in the morning and continue until six at night. The ordinary treatment is good but some are knocked about; they are insolent and get abused. If they do not mind their business and make the horse go, they get a cut of the whip or some slight punishment. This does not happen very often. The next step is for boys to go below draw the skips. It is hard work, and is sometimes over the shoes in mud. The boys, however, are cheerful and lively. A lad continues at this work about three years, and gets about 9s. a week. Boys are now very scarce and boys of from 9 to 12, who some years ago got 6s. now get 9s. Boys begin to use the picks at 11 or 12, and then, according to their ability, get l3s. or 14s. a-week. They are not worse used than boys at school.

The boys who work in the ironstone pits are more exposed to the wet than boys in the coal-pits. Their labour is cheaper than that of men, but boys of eight or nine get from 9s. to 12s. a week From 9 to 12 years they get 12s. or more. A more happy set of lads there is not. They are singing all day long.

The stone pits vary in height from about a yard to a yard and a half.

The butties take apprentices, sometimes five or six. These live in their master's house, and he behaves well towards them. They are allowed about 6d. a-week pocket-money. Some masters take care of them on Sundays to make them properly observe that day, but others do not. In consequence many do not go to school nor to public worship.

They are however, take them all in all, a happy well-treated race. There are some exceptions, but not many. In general they are a happy race.

The working of the mines brings on asthma. Working in the cold and wet often brings rheumatism. More suffer from this than from any other complaint. Accidents are often met with. The men will send a boy where they do not go themselves and some have their limbs broken and others lose their lives. The men send them under the hole to fetch the slack. There is a greater proportion of accidents amongst boys than amongst men.

It is now difficult to get these boys. The mother will come and say to the butty, 'If you give him so much, I will take him somewhere else', and boys who formerly got 6s. now get 11s.

Some parishes will not let the butties have their pauper children as apprentices. Boys in other trades will work for 1s. 6d. to 2s. a-week.

The proportion of men to boys in the iron-stone pits is about 100 men to 70 boys. In the coal pits the proportion is 100 men to 30 boys. Boys are not so necessary in the coal-pits. In the coal-pits horses can be employed, but in stone-pits only very small horses and asses. These latter animals do not thrive in the coal-pits, as they are too hot for them. The coalpits are warmer than the stone-beds, though at the same distance from the top. The boys have comfortable substantial clothes. A boy at 14 is able to be independent of his parents and some will leave them but it is very unusual; they usually remain with their parents until they get married, which is usually at 18 or 19.

No.8 - Edward Oakley.

I am now nearly 40; I first went down to the pit at 8. I had to carry slack back to the gob and wait upon the men. I was an apprentice to a butty collier. I never received any wages till 21. I served 13 years' apprenticeship. I was bound when I first went down. I think apprenticeship a very bad thing. Butties get apprentices from parishes and their own children to learn other trades. Some apprentices are used very rough; some have better places. Very little play to a butty's apprentice; always kept to full employment. Some are pinched very sharp; in other places they are well fed. They are clothed very indifferent, very shabby. In some places, they are well lodged; in others, the butty is very poor and has not wherewith to make things comfortable. The boy would learn his trade just as well if he were not an apprentice; not a morsel of difference. Sometimes fathers bind their own children, being induced by the present of a suit of clothes, or a watch, or some other enticement. I had 13 years. of it. It was a hard time. The last part of it thought very hard. There is a butty close by here who has 10 or a dozen apprentices at a time. The butties here in general do very well and build lots of building. The apprentice can learn nothing. The colliers are very ignorant, being always buried alive in the pits. The butties never put their own sons to be colliers but send them to learn other businesses.

I was an apprentice at Wednesbury, two miles from here. I never knew any child under 8 sent in to carry out slack; it is very hard work. A lad ought not to go down into the pit before 10. It is full young enough. It hurts a lad's health if he be worked hard; and there are very few who are not worked very hard.

I took to horse-driving at 12 years of age and kept a, it till I was 15. I then began to work with a pick and to get the coal. I holed and cut away the bottom. Lads at that age are not allowed to try to cut down the coal. About 17 I began to take my turn, and earned for my master 4s. a-day; that is, I worked as much as would have come to 4s. if he had paid for it and kept on that way until 21.

The drink in the pit is pretty poor but some is very tidy. The greater part of it is not worth a penny a quart but the butties reckon the beer they give as worth 6d. a-day but it is no such thing.

The pickman's work will take a man, one day with another, eight hours to do a day work. Sometimes it is more time, and frequently less. I pay 3s. 1d. for my house-rent. We have coals allowed and the coals are drawn and laid down at the collier's house. We have to pay for the

drawing, according to the distance. It is not common now for the wives to bring home the coal but it used to be so. For miles round it is quite a regular thing to have the coals drawn. In some collieries it is not so. The master and the butty together find the coal; that is, the master loses his coal, and the butty loses his charter for digging them. The colliers have the coal at which they are working that day; if top-coal, they get top-coal; and so on. The coals are sent home. Our bed of coal, when regular, is 10 yard thick but sometimes runs 12, 14, or 15 yards.

The masters here screen the small coals, to rid them of the dust and use the screened small coals for the engines. The dust sets fire to itself on the bank. If it had air enough within it, it would not fire. We have fallen in with a chance coal, just above the thick ten-yard coal, which made together twenty-yard coal but it did not extend far.

The boys in the pits are more exposed to danger than the men, because they do not know when they are going into danger.

This is a very fiery country. A Mr. Ryan, 15 years ago, tried to bring up a regular supply of gas. What he meant to do with it people did not know. He tried to get it up in pipe into the hovel but he failed in his endeavour. We have frequent explosions.

The iron chains are not so good as hemp. We never know when the iron is to break; but the hemp shows when it is getting bad.

There is a great deal of religion here. There are pits in which there are prayer meeting every day after dinner and walk with any who do not. We have had preaching down in the pits. That has been the cause of turning many a poor sinner to God and to amendment of their lives. Many a one goes down into the pit to hear the preaching. When there is any prayer or preaching, the master allows five minutes beyond the hour. In most pits there are laws against swearing when the people are in the pit and the men that swear lose their beer. There is very little public breaking of the Sabbath. The policemen are very useful and stop all irregular proceedings.

There are Sunday-schools for the children to go to, if the parents will send them.

Six is the usual number that goes down at a time. We stand upon the skip.

No.9 - William Orton.

I am 17. I never could read. I went 3 years to school, when I was about 4 or 5. I went to carry picks about 7 years of age. I could not get no schooling. I stopped on the bank and when the picks came up the shaft, I took them to the blacksmith's shop. At first I could carry half a dozen and when I got stronger I could carry a dozen at a time. I was paid 3s. a week. I could sit in the hovel until I was wanted.

At 10 I went down into the pit to carry back the slack into the gob. The coal is very hard. There is a great deal of hard stone in the pit, as hard as iron. I was 2 years a carrying slack, and got 10d. a-day at first, and afterwards I had 1s. a-day and by and bye ls.6d.

Then I took to horse-driving. I did not assist in loading. The coal is too heavy and bulky for the drivers. They have stout able men to do that. I was 3 years at horse-driving,

I then became a young man, and have been so about a twelvemonth.

The holers cannot get done their work under 12 hours. They are much interrupted by the blotches.

No.10 - Charles Bleaden.

I went down at 10 years of age into the pit to carry back the slack into the gob. I got 18. a-day. I came on the bank by half-past 5 or soon after in the morning, and got down and was ready by 6. The skip will go down and up in 3 minutes 160 yards. In 20 minutes or half an hour we got all down. As soon as we got down and were undressed we began to work. It is hard work for boys, but is easier for boys than for men; it is so thin to go under. We had no time allowed for breakfast and the engine kept going, but we could manage to eat a little. We had an hour for dinner, from 1 to 2. Our friends send down our dinners. The butty gives a quart of beer, but it is poor stuff. If you was to drink of it you would say so. It is not worth a penny a quart. We left off at 6, the same as the men and then we put on our clothes and came to the foot of the shaft and came up and got beer in the hovel, a quart apiece. The head master allows the price of the beer and the butties brew it and send what sort of beer they like. We had a hot supper when we came home; anything we could get; sometimes better, sometimes worse; broiled bacon and baked potatoes; sometimes boiled pork, sometimes beef. If we had done good work we had beer besides. The height of the place into which we crawled to get out the slack was 2 feet 6, or 3 feet. I kept at this work two years. I then went to drive a horse. We ride if the horse knows the road well; if not, we walk generally behind the skip. If it is a down-

hill road we have chains to keep the loaded skips from going over; if it is a level road there is no occasion for chains. I was 3 years at driving. I worked from 6 to 6 as before, taking the hour to dinner. I had for driving 2s., and afterwards 2s. 6d. and last of all 3s. The stronger a youth becomes they can give him more work. A driver at 2s. needs a man to help him, but if he be big and strong he does not need a man. There is a man for every road to help the drivers. There is a horsekeeper for the horses and we had no trouble with the horses. I next became what they call a young man, and did anything; sometimes I holed with a pick, sometimes I loaded the skips, sometimes I took the duty of the man on the bank, that is, I landed the skips when they came up on a waggon, and pushed the waggon off from the pit. Boys and horses then dragged the waggon down to the wharf. For work on the bank I had 3s. 3d. a-day; for holing I got 4s. it was piecework, and I could make 4s. I have now been 12 months at it. I like the pit very well. There is the danger of it. On Saturdays we work as usual. When we do play, Mondays and Thursdays are the days.

On Saturday nights we take a good wash with hot water and soap down to the middle. very night we wash face and neck and hands. On Sundays I get up at 6 or 7. We break at 9, and go to chapel or church. We have dinner at 1, and then go up-stairs and lie on our backs for 3 or 4 hours or more and enjoy our rest. In summer we often go out to the spoil bank, and lie down and rest on our backs; in our pit we reckon once a-week, and it is customary about West Bromwich. We are under no bond, and can leave when we like. The usual rule in this country is a fortnight's notice on both sides.

I used to go to school. I have other books. I can say the Lord's Prayer and the Creed, but not the Ten Commandants. I sometimes read newspapers. I have heard Bell's Life read. It is many years since I wrote.

I have never had a day's sickness in my life. Accidents often happen. We have no door-boys in our pit at all.

Very few men go to public-houses on Sundays. A good many go on Saturday-night to public-houses and many get drunk. I was never drunk myself in my life. Some spend all their money and the next week will clam for it, that is, go without victuals, or get what they from their companions in the pit. Their wives and families must do as well as they can. By Friday they know all about it, and are regularly starved. They think nothing of it and again fall in to the same thing. We have always a good dinner on Sundays. I always pay what I owe when I get my wages and then have a merry life after that, when I ken the rest is all my own. If I could get as much money as I get in the pit, I would sooner go into the fields and work. We have a field-club and I belong also to a benefit-club.

We have teetotallers, but very few; none of them miners; we could not follow the work up without beer. If one of that sort were to attempt to come amongst us, we would soon take to the canal.

No.11 - John Greaves.

I went down to the pit when I was 7 years of age to open doors. About from 9 to 10 I took to carry dirt back from the men into the gob. Every boy has to clear away for two men, and If they do not do it they strap him. He dare not say much about it, for fear of their giving him more and perhaps master turning him off. Most of the men wear a leather strap round them, which they can apply to the boys if need be. It is very hard work. I worked till 17 to 18. I had 6d and 8d. a-day when I opened doors. There are so many to keep the boys awake, they do not often sleep. When I began to carry dirt I had 1s. 6d. a-day, and gradually to rose to 2s. A boy who keeps two men clean gets 2s. a-day. I took to hewing and was paid the piece. I had 3s. for a day's work. Next week it will be 2s. 9d. All round Bilston the wages have for a long time been 3s. About West Bromwich they give 4s. The pits are very dangerous from the coals and stone falling from the top. We have not much fire in our pit. It is 90 yards from the surface. The bed of coals consists of the new mine coal, which is 2 yards thick, and fireclay coal 7 feet thick, with fireclay bat between them of the thickness of three-quarters of a yard. If anything fall from the roof it may prove serious. The slack is carried behind pillars, in what they call the stalls, which are left to keep the top up. The ground will sink sometimes from the top 7 or 8 feet. Rock 20 yards thick may sink down like the rest. I have seen stones of 15 tons fall down beside me. Some men get killed by talking coal from under rocks; sometimes the butties have been killed.

The boys are not used so bad as they were. It is the butties' apprentices who are worst used. These lads are made to go where other men will not let their own children go. If they will not do it they take them to the magistrates, who commit them to prison.

A Mr. * * caused his apprentices to go where another person would not go. I have seen him take up his foot and kick them to make them go. He has a beer-shop, and if you do not go to his shop to drink, he discontinues his employment. One of his men went up to the bank against his leave and he got a warrant against the man, and he was sent for a month to Stafford.

The butties turn a man off at a moment's notice when they think fit but if a man go away without a fortnight's notice they get a warrant for him. Warrants are taken out against boys as much as men.

I have known apprentice boys made to work all day, and all night, and the next day. They might nave slept a little in the night perhaps.

We have an hour at dinner-time, and apprentices who have long been at work fall asleep and can hardly be got to wake.

We have another very bad complaint. Our beer is very bad and instead of getting a quart at dinner, we often have only a pint or a pint and a half.

Our head master keeps a tommy-shop and the butty will tell us plainly that if we do tommy enough we shall not have more work.

No.12 - Joseph Dyke.

I am about 19. I have heard the evidence of John Greaves, and I believe all to be correct and know myself the greater part to be true.

No.13 - William Troughton.

I was 18 in last March. I began to work in the pits 3 years ago. I carried dirt or slack from the men holing the coals back into the gob. I crawled under the coals, and with a rake filled a basket, and then crawled out and carried the basket back about 20 yards, and emptied it out. I came by half-past 5 and got down by 6, and went to work. Men crawled under to take out the big coal and rolled and pushed it out and loaded the skips and then the boys crawled in and filled the baskets with the slack, being the small coal and dust. If the coal be as big as an orange, it is taken up by the men for the forges and furnaces but if the coal is only as big as an egg it is not worth taking and the men leave it. The boys keep on trousers, shoes, and stockings, to this work. The coal sometimes gets inside the trousers and annoys, and you sweat, and the dust sticks to the skin. When we come home after 6 we wash the face, and neck, and hands, and half up the arm, and wipe the breast with a towel. The boys have a pint of beer allowed to dinner and a pint in the hovel after coming up. It is sometimes good, very good, but not often very good. It is generally in a middling way, but not worth over a half-a-penny a pint. The best of it is only small beer. We have generally a jack bit in the morning before starting from home. The boys take down a little bit of bread and cheese and a drop of beer, and a drop of coffee - sometimes only water - and have it when they can so as not to stop the work. The doggy sees that they do not stop the work. The doggy is always a good workman, but he is very strict over the others. He has 5s. a-day, and all he does is to walk about in the pit and make other people work. Some of them would not work if it were not for the doggy. He assists the butty. We must take the coffee from the bottle when and how we can. The dinners are sent down the pits in the skips and we know them by the marks on the handkerchiefs. The dinners are carried to a large room cut out of the coal and we assemble and sit all round and one of the men in the middle, with the bottle pours out the drink into a tut and serves everybody in turn, until it is all used. When I came up at night I used to have broth warmed up, the remainder of what had been used at dinner, and perhaps bread and cheese. We never had meat for supper. We are sometimes allowed to take home part of our beer from the hovel, instead of drinking it there. We have great deal of fun when at dinner in the pit. Sometimes there is swearing but if the butty hear the swearing, or if anybody tell him, he keeps off the beer from the offender; but it is all drunk by the others. The men all agree to this rule and it is strictly enforced. They always tell on each other. If a man break a tut he has to bring two in the place of it. If a man swears in any part of the pit the religious men will tell on him, and he loses his beer that day. The men are afraid to swear for fear of losing the drink. Between supper and bed-time in summer I would take a walk out and come back, and go to bed at nine. I sleep very sound, but waken regularly at five. After twelve months I took to be a horse-driver, and got 3s. a-day for the days I worked, which would be four or five days a-week. If a man belonging to the pit get killed, nobody works until alter the funeral, which is usually on the Sunday. The master is at all the expense of the burying in such case. The master allows the widow six shillings a-week, as long as she continues a widow, and every month a load of 15 cwt. or a ton of coals they do not stand very

particular. The men also collect 6s. a-week for her for 6 months, to enable her to turn herself round. All the men of the pit attend the funeral of a man who has been killed, and the butty finds them in bread and cheese and drink and they generally get very freshish before they leave. The butty gives them good public-house beer on such occasions.

We have 20 men and 20 boys in our pit. The youngest boy is about ten. He sweeps the rails down in the pit. The horses and waggons can come up near to the place where the men work, but the skips may have to go 30 or 40 yards on slips before getting to the horse-way. We have no door boys. The working is about 300 yards from the shaft.

There are hundreds of mice in the pit in all parts. There are crickets chirping everywhere. In some pits there are rats. The rats and mice steal the candles. They come down at first in the oats and hay and breed in the pit. Cats are kept in the pit, and generally make their appearance amongst the men at dinner. We have a cat in the pit which has been down a twelvemonth and lately had 6 young ones. The pit is warm, beautifully warm. It is about 223 yards from the surface. We hate hundreds of jack-gnats in the pit. They bite you and make a blister on you. There are wood-lice in any part of the pit wherever there is wood. There are a great many forty-legs and black-clocks. Mushrooms will grow well near the stable, 30 or 40 yards from the shaft. The pit is so warm it could grow anything and there is plenty of water. The candles used in the pit are short sixteens. Every man has 5 a-day, or whatever may be necessary. About 12lb. are wanted in a day for the men and for the roads. Candles are stuck on the coal all along the roads, for to enable the horses to see We have much sulphur in the pits, more than there is in any part of England, as I have heard people say. Sometimes they cannot work for it. They use a lamp at the bottom of the up shaft. There are fires sometimes lighted at the foot of the shaft. There is a good deal of choke- damp. When men fall down, the other men get them up the shaft and dig a hole and put the head in and that always brings the man to life again if he has any life left in him at all. We had ironstone-pits about West Bromwich but they are worked out now. But there are 2 or 3 ironstone-pits a short way off, not a mile.

We settle every week. The butty pays the men at the hovel, to every man his money. The men contribute then 4d. a-piece and send for the value in beer and get good beer, better than butties' beer. A day's work of a pickman is 1 yard 6 inches in front, and 2 yards inwards, and 2 feet high. On Sundays the miners are usually dressed in black clothes.

No.14 - John Nevit.

I am 16. I have never been in the pits except three days, and afterwards three nights. I work on the bank. In the former part of my life I made soaping tiles, to put on the land to carry the water away, when I was in Shropshire. I came to this country 9 months ago and I load coals on the bank. I turn over the skip when it is hanging in the chain and I gather them up and put them into the cart. I get 1s. 6d. a-day. I do not like it. There is too much work for me. I am very well used. The butty curses sometimes at a little wench on the bank but he does not curse at me, and I am well content with him.

No.15. - Thomas Rogers.

I began to work in the iron-mines at 9 years of age. I drew with the girdle and chain. I suffered great misery. My skin was chafed very much; I wrapped my shirt round the sore place. I had my skin hurt for weeks together. The balks in which we drew the iron-stone were on wooden feet like a skip. It was dreadfully fatiguing. It was very cruel work. This is entirely done with now in this part of the country and ought never to be allowed.

No.16 - Thomas Harrison.

I went to work in the ironstone pits at 12, to push the dans. The seam was a yard high which is much more than the seams in the ironstone pits usually are. There wax a railway at the bottom. There was no airway, only one shaft. The air was sometimes very bad. I worked from 6 to 6, and out of that time I had an hour for dinner. I had a pint of butties' beer that was very bad. It would take 6 or 7 pints of it to make a good pint. If a boy was not very dry he would not drink it. I had 1s. a-day at first and at last I had 1s. 11d. a-day. I have left this work nearly a twelvemonth. I left it because it was too hard work. I then went into the coal-pit to carry back from two men and sometimes three or four but for more than two was too much. I get 1s. 11d. a-day. I work from 6 to 6, and have out of that time an hour for dinner. I am said to be allowed a quart of beer but have only a little more than a pint and it is bad and would take 4 pints of it to

make a good pint. We sometimes chuck part of it away. We are well used in our pit. There are no apprentices. I once worked with apprentices. They were very well used but the butty made them work longer than we, even as late as 9 o'clock at night. The pit is very sulphury. We expected it to fire yesterday. We were working today, and came back to the gate-road and employed ourselves in carrying out dirt and put a fire in the shaft but the smoke drove us out by half-past 5.

I can not read or write. I cannot say the Lord's Prayer. I do not go to church or chapel. We worked too hard for that. On Sundays I get up at 10 and take breakfast. I put on Sunday clothes and walk about in summer. In winter I sit by the fire. We get dinner at 1, after that we go out or sit by the fire. We go to bed towards 9. I go once almost every mouth to the Romans and hear a sermon, but I do not understand it. I have heard of Birmingham and London and Liverpool and Manchester. I have heard We have a Yorkshire man in our pit. He is an honest fellow.

No.17 - James Stone.

Is overlooker of the forgemen. He began work at nine years of age, and has continued ever since. Boys generally begin between nine and ten. We have four or five at ten years of age. They work at the cold rolls, that is, they put plates through the cold rolls. They get 6s. a-week. Boys often at 12 years get 8s. They catch the cold rolls and move out of the way. The work is hard enough for the boys but they are able to do it. They begin work at six in the morning and leave off at five in the afternoon. They must an opportunity between the heats of breakfast. There is generally a quarter of an hour or twenty minutes between the heats. They are engaged 10 to 15 minutes in pulling out the rolls and then may have to wait 20 minutes for another. A boy about 13 gets 12s. a-week. It is not usual to take apprentices. I have only one boy apprentice out of four or five. There is never any shortness in the iron trade as far as regards eating and drinking. The boys escape very well from being beat by the men. The foreman will not allow it and such a thing is very rare. There is only one apprentice about the works. He lives very well, lives with me and has as good a bed as any of us and dines with the family on Sundays.

No.18 - Joseph Slade.

Is aged about 26. Is a furnace-man. Began to work at eight, and then filled boxes. The boys who fill boxes are usually called box-fillers. Very few begin so early now, but usually at 11 or 12. The usual pay is 1s. a-day, some by the week at 5s a-week. They come at and leave at five. When the furnace is full they can stop an hour. They get half an hour for breakfast and an hour to dinner. There are two sets to each furnace. There are two sets of men and boys, one for the day and the other for the night and they change turns eve week. The set which works in the day has to work at night the next week and so in turn with the other set. There are no apprentices in this branch.

No.19 - Thomas Lee.

Aged 42. Is a moulder, that is to say, a maker of the moulds into which the melted iron is poured. He has followed this occupation for 25 years. The employment of the boys is to make all kinds of works for casting and running the metal into. He himself employs boys. They are as useful as men. They take them at 9 or 10. Some are taken younger when men employed in the work have sons but they are of very little use before that age. Some are taken as early as eight. There is some work heavy and some light and there is the brass trade. In the iron-trade the boys enjoy very good health and a person may hold out 40 years at it. In the brass trade a person cannot hold out above thirty years, it is so injurious to the health when in a melting state.

The hours of working are from seven in the morning to five in the afternoon. Half a hour is allowed for breakfast and one hour for dinner.

In the iron-trade the health does not suffer much, indeed it is reckoned to be very health until thirty but when men begin to get old they are not so strong. A boy of 14 years of age will earn l0s. a week, some 14s. a week, and some l6s. The boys are used very kindly by the masters. They are not made to do anything that is dangerous. They do the work that is too trifling for men. They do work which takes up as much of a man's time as of a boy's and the boy's time is more economical. There are a great many boys in a great work, it some branches two or three boys to a man, in other branches two or three men to a boy. It the gas and engine department two or three men to a boy.

In the branches which are heavy and require skill the boys are not equal to the duty. In some parts they do as well as men, and are more economical. There are very few apprentices. The boys go and work where they think proper and do not live with the masters. The apprentices live in the families of the masters and are treated as well as the members of the family. They are well clothed and on Sundays very decently, so as to be fit to appear at a place of worship anywhere. When he had any apprentice he was treated as one of his own family.

When a man gets down the hill he must leave off the hard part of the trade, and take back to the work of the boys.

No.20 - John Crompton.

I am a worker in a foundry. I began work at 6 years of age. I made models for the articles in which the cords of windows run. I worked 3 years at 2s. a-week. At 9 I went to nail-casting. I made moulds for the nails. They were as small as 6 ounces to the thousand. The moulds were in sand and clay. I was paid 9s. 6d. the cwt., which sometimes yielded 33. 6d. a-week. I could do more then than I could when I became a man. I made moulds for grates, privy-traps, and all that there kind of work, for townsfolk. I have continued moulding all my life until within four years, when I took to melting but I have left it off, because breaking the pig-iron into pieces before putting it into the furnace was too heavy for me. I am now 57. I have taken to moulding again. I cannot use the pen. I can reckon up plain figures.

A boy at 6 will now get about 2s. a-week. A boy at 10 will get 10d. or 13. a-day. A boy must begin young and be taught one little thing first and then another, and gradually be brought in by little and little. The boys at 6 strew a little sand upon boxes and take to it by degrees. A lad of 14, if a clever lad, will get 14s. or 16s. a-week. A man of 18 may get a pound. A full-grown man will, may be, get 24s. or 30s or £2, according to his skill and industry. A common man set to work amongst two good ones will get perhaps 24s. A good workman will get 3s. and a very good one 40s.

The moulders begin at 7, and work till 5 in the afternoon, and sometimes till 6. They take half an hour to breakfast and an hour to dinner. If they work at piece-work, they do not stand for their time, and do what they can to get their work come to money. Our work is not long work but it is very fatiguing. I have been on my knees before a box moulding a figure 6 hours at a time, which is very tiresome. Sometimes a man will be on his knees a whole day together and some three or four days together.

Some boys begin to mould at 12 and 14. Some boys will come out of the pits to work in the foundry, because there is no risk in the foundry, except of being scalded. There was a lad last week, who threw water on the ashes out of the furnaces, and the steam scalded his face. Some get hurt with the melted iron but it is seldom very much. Many try moulding, but cannot succeed at it, and leave the trade. I do not work at loam moulding. This is used for all manner of engine-work. The moulding is made in loam, good sand with horse-muck mixed up together, and chopped up for hours. Some get £3 a-week at it. If the stuff get dry when they are mixing it, there must be some clay put in it and it makes a firm, solid stuff. It is fatiguing work. I will not work at it. The moulders have good health. The heat of the iron is disagreeable and the fumes also. The moulders take the melted iron out of the furnace, and pour it into their own moulds. Very few moulders know anything about melting the iron in the furnace but they all pour the iron into their own moulds There are now boys of 10 or 11 getting only 5s. a-week. They melt the pig-iron to make it into castings. They are all grown men who do this work. It requires great skill and great strength. Sometimes a lad of 17 to 18 may do with somebody to look after him sometimes. There is one at our works who gets 30s. a week. In small cupolas it will be lower wages. The men have to break up the pigiron into pieces; a piece of 4 feet will have to be broken into 4 pieces. If not broken into pieces it would not go down the cupola. The smaller the iron is broken, the easier it melts. There was a man I worked with who would do more in two hours than I could do in three hours. I had a match with him, and he won the whistle, and I lost a gallon of ale by it. Coke is used at this work. There are no boys employed. The first thing in the morning is to fill the furnace with coke. Let it burn down a basketfull to heat the furnace; then put on a basket about a strike, 36 quarts, or nine gallons. Put on 1.75cwt. of iron. Perhaps in 20 minutes we want to put on another basket of coke; same all the day through, and 2 cwt. of iron; and every 20 minutes the same coke, and iron every time. If a very strong blast, it may be put on every 10. or 15 minutes. If a very slow blast, it may be 30 minutes, or 3 quarters of an hour. I have melted 3 tons a-day of iron. The iron will melt sometimes, after it is first put into the furnace, in 40 minutes, but it may be an hour, or an hour and 40 minutes, according to the blast of the engine. The cupola furnace has a resemblance in its work to the

blast furnace. The coke and iron are put in at the top and the melted iron is taken out below, but we take it as often as we want it. The boys enjoy good health. The men live to a good old age. I am 57 and am a good, stiff, hard old chap and there are many others as well as me. I worked 15 months as a moulder at a place where they cast from the iron which came from a blast furnace. We cast 3 or 4 inch pipes, and then 30-inch pipes, for water-pipes in London. It is all coarse work. When we were casting, we could get the iron out any time from the furnace. They usually only tap every 12 hours when they are making pig-iron. I have cast things when we were obliged to wait 15 hours to have enough of iron in the blast-furnace. It was about 20 tons. It took 16 horses to draw it out of the yard. Some things require annealing. They are buried in coke-dust, or in saw-dust and a fire made over them and they are made almost melting hot. They are much stronger for it. Many things do not require it. A kettle which hangs over the fire will not take so much annealing as nails. Nails are some 6 ounces a thousand; there are as large as 10 pounds a thousand when annealed, are as good as nails made by the hand. If a man should break half of them, he will still be much cheaper off than if he bought nails of wrought iron.

No.21 - Thomas Delay.

I am a moulder. At 7 I went to fetch the horse-muck to make the loam of. I spent 6 months at it. I had so much a bucket. I collected it in buckets in the streets, and sometimes took a little out of the fields. I got about 8s., sometimes more, sometimes less. I had 1s. a bucket. There were some boys and some girls. They used to take 4 buckets from one, then 4 buckets from another, until it went all round. I went then into the foundry, to wait on the man, make cores for the hollows of the castings and had 10s. a-week. I put the horse muck amongst the sand and grinded it up and made the cores of it. I was 6 months at this work. My father put me forward to small jobs, to make small moulds, little carriages, small castings. I got 12s. a-week, and, as I improved, I got more. I got on to 18 years, and got 3s. 4d. a-day. Sometimes I had piece-work, which obliged me to work hard but I got money for it. I can read and write a little. I cannot cipher much; I am more for work. I can reckon my work. I can say the Lord's Prayer, and the Creed, and the Ten Commandments. I say the Lord's Prayer at night. I read the Bible. I also read books about Turpin and Jack Sheppard. I read Bell's Life in London. It is much read in this part; but some houses do not take it in. I now and then in summer-time go to a wake or a fair. I usually go to church and chapel on a Sunday. I went to Sunday-school until they made me a teacher and then I left. I did not like to teach.

No.22 - George Haden.

I am 17. I went at 12 to the casting of iron pipes. The melted iron is taken from the refining furnace. We make from the iron melted a second time engine-work; such as blowing-rods, spear-rods (which go up and down in the engines), steam-pipes, and everything for the steam-engine. We make large iron plates or flats, boilers to wash in, or used in brewhouses, grates, and doors to shut.

I go at 7 and leave at 5. It is very cool and comfortable work whilst we are making the moulds, but it is very hot when we are pouring in the melted iron. I am obliged to like it. It is very hard work, but it pays 12s. a-week but very often they give me a shilling a-week extra. I keep my health very well. I cannot read or write. Most of the articles which we make from pig-iron melted in the cupola are also made from the blast furnace but are not so good. We make rails for the railways in the pit from the iron melted in the cupola furnace.

No.23 - Edward Stevens.

I am just turned 18. I went to casting when 10 years old. I liked it very well; it paid well. The work at which I was employed stopped in consequence of the partners breaking it up, and I went to the iron-works to bundling, that is, tying up iron which has come from the rolls after it has become cool. I get 12s. a week at it. I am a teetotaller. We have three other teetotallers in our works, who are puddlers, and are exposed to as much heat as any persons in the work. They keep their health well, and I have often heard them say that they were much the better for not taking any strong liquor. The men who take much liquor are very much injured by it.

No.24 - Henry Barnett.

I am 19 years of age. About 12 I went to hollow-ware casting; I had to get the sand ready

for my master: it is a loam-sand, and of a red colour. I continued 3 years and 6 months at this work. I had at first 9d. a day, and 1s. 6d. before I left this work. I came at 6 in the morning; I had half an hour for breakfast and an hour for dinner. The men left off work at half-past 5. After the men were gone we opened the moulds and took out the sand that lay between the two parts of the mould and got done about half past 6. It was pretty hard work. We lost great deal of sweat. The boys had not the privilege of drinking beer, but they were allowed to drink as much water as ever they liked. The grown men drank a great deal of beer, but they seldom gave us any, except sometimes when we went to the reckoning. It was what they call good. I liked the work very well, only there was not quite enough of money. I had always been advised to take the biggest penny and I considered it my duty to do so.

From that work I went to the rolls, and got 10s., which was 1s. more a week; and after I had been there a month I had 11s. and during 4 years' time I gradually rose to 15s. and my own master, a merchant iron-roller, gave me a great deal of good fresh beer to encourage me, as much as would come to 6d a-day. If the days were very warm we had more beer and in the cool days we had less. If the work happened to be very heavy, such as making rails for railways, then they gave us more beer. The master of the works paid for the beer. It was very hard work and it was very hot. I have come home at night with my corduroy trousers wringing wet and my shirt as well. I took them and dried them and washed my face, neck, ears, arms, and up to the elbows, and wiped myself about the body with a towel, and then went to bed. In the works we often had to wipe ourselves with a towel. We frequently had a hot supper before going to bed. I got up next morning after 5, so as to get to the work by six. We usually worked 11 days in the fortnight. We worked usually on Saturday until 5 in the evening, and came on Monday night, and left off for the week at 6 o'clock on Saturday morning; so that we had 6 days in one week and 5 in the other. Oftentimes we were paid for eleven ad a half days, the pay of the half-day being given for nothing, by way of encouragement.

A great many boys are not able to stand the heat in the summer-time, and are obliged to leave the work. Sometimes in winter, if there be vacancies, these boys will come back. The boys often have occasion to go to the club doctor. There is 6d. a fortnight at the reckoning paid into the funds, from which the doctor is paid. I can read middling and I write a little. I have read the Bible and Testament and Prayer-book. I could say at one time the whole of the catechism, but I have not said it over once in the full in the last seven years. I have refreshed my memory by teaching my sisters at home. I have attended Sunday-schools. Those who can take their learning well get on well enough but the others very indifferently. There is strict order kept; the boys now may go to a church Sunday-school, but formerly they could not. The boys who misbehave themselves in the church or meeting have their names put down but they do not know of it but on the Sunday following they are told of it, and are well caned for it. The other boys like to see it. It is quite a different thing to see others caned than for a boy to be caned himself. I have read the sixpenny books, the Universal Spelling-book and John Wesley's Lessons. I have read the Alphabet and a book called Short Spelling. I have not read any other books except Wesleyan Tracts. These tracts are left for reading and on Sunday they' come for the tract and leave another and so they go from week to week, coming sometimes on Sunday but sometimes on Monday.

No.25 - Joseph Harrison.

I am assistant puddler. We put 4cwt. into the puddling furnace. We have 6 heats in a turn. The master puddler is allowed 1 qr. a heat but if he do not return twenty two and a half cwt. in the turn he is blamed. The iron does not always come out alike. After the iron has been in the furnace ten minutes or a quarter of an hour, it becomes soft and I have to tear it to pieces or to break it. It begins to boil in half an hour and then my master takes the work in hand and I have to do something else or attend to the fire. When I work my master rests himself, or does as he pleases but when his turn to work comes, he takes care to make me work. If anything goes wrong he always says that I am in fault. Master is never in fault himself. If things go cross, my master swears and says anything. He allows me 2s. 3d. a turn. Our time is for 1 week in the daytime and the next week in the night. It is better at night than in the day, as it is not so hot and our fire is hot enough of itself. When master has wrought some time and is tired, he sits down and I take to it and work awhile and lie takes to it again, and completes the heat and the pieces are taken out one by one, and laid under the forge hammer. We reckon once a fortnight and then I am allowed some beer. It passes for a night but it is a small one. Master pays for it. I like the money which I get very much, and for the sake of the money must like the puddling. It is work that pays well. When an assistant puddler gets on, he at last joins with

another and they take a furnace, and share the money together. Some masters have apprentices but not many of them. They go into the country to get apprentices but the apprentices often find it very hard work and run away. They put more on the apprentice than on anybody else, because he has not got his liberty. We have lately had only eight or nine turns in the fortnight, because trade is bad.

I cannot read and write. I cannot say the Lord's Prayer. When I go to bed I generally go to sleep. I was not brought up to school, but only to work. I sometimes go to church. I must have a little pleasure. I go into the fields and breathe fresh air, and sometimes, when the sun is hot, I lie down on my back in the sun, and doze awake and wish I had something to drink. The days in which we work we are so tired before our work is over, that we go home and have some slipper and then we go to bed.

When we have the night turns, after breakfast I take an hour's pleasure and then go to bed. Sometimes I go to bed at once and get up in the middle of the day and take an hour's pleasure and then go to bed again, and lie until it be time to get up and go to work.

Master sometimes tells me that I get as much as he and all that is to get we to work better for the future, but we know what all that means.

No.26 - James Simcock.

I am 17. I am an assistant puddler. I come sometimes at 4, sometimes 5 or 6, according as the other set is able to leave. We have 6 heats in the turn. We put in 4cwt. a heat. Each quantity, that is, the 4cwt., is divided at least into 6 balls. The iron begins to heat in perhaps 20 minutes, but it may be 40 minutes or three-quarters of an hour. I have to break it and make it soft by beating, and it becomes soft, and at last boils up like unto a pot. It will keep boiling 10 minutes or a quarter of an hour. My master takes the work in hand when it boils. I relieve him a short while at this work. After it has stopped boiling he divides the iron into 6 balls and rolls them about and draws them out one by one and lays them on the forge hammer. We then prepare another heat in the same way. We are one week in the daytime and the other at night. It is hard work. I get 14s. a-week and am paid by the puddler. When I become a puddler myself I will get better wages. I do not know yet quite enough how to work the iron when it boils.

I can read the Testament. I can rend the spelling-book and the sixpenny-book. I have never read anything else. I cannot write. The boys sometimes quarrel but are soon friends again. They never carry any complaint to the masters. Any boy who ever does so is blamed the others and sometimes is beaten for it, and sometimes put into the river. This pre vents all quarrelling, and preserves peace amongst us all.

I have been about a year and a half at puddling. I like the work very much but it is very fatiguing and very hot. The men last week were obliged to give over work. They could not stand to work. We have very little play.

No.27 - Samuel Ellice.

I am 17. I am a shingler, that is, I receive the balls of iron from the puddlers on the forge and then it is beat by the great forge hammer. I turn it round and place it so that it is hammered into a large square form. When we have done with one puddler another will have his balls ready, so that we are kept constantly at work. There is only one forge hammer in our place and there are ten puddling furnaces. I get 3s. 6d. a-day but it is very hard work, and very hot particularly in summer. I begin sometimes at 4, sometimes at 7 or later. There are two sets of puddlers and of shinglers and they take turn week about, day or night. If the engine go well the night set may get their work done so as to get away by 4 but it may take much longer time. We often come and have to wait 2 or 3 hours. We form some judgement when we shall have to begin, by the time we have left ourselves. If we have left off very late we know that the next set cannot get done before a certain time. We have no regular time for breakfast or dinner. We keep on working and eating as we can, so as to keep the machinery employed. We are not off our legs all the time. We drink a great quantity of small beer. Some men take half a gallon a day of ale. We generally play on Monday. We are paid on the Saturday-night. We go to a public-house to get the change and some drink a quart and some two quarts.

On Mondays we go to the public-house and talk together and drink a pint of ale and sometimes go and have a game at marbles to pass the time. Nine pints make hard work and we have enough of hard work during the week. We sometimes exchange a blow or two gratis to amuse ourselves. On Sundays I rise about 7 or 8. After breakfast I wait at home and go afterwards to the church, sometimes to the chapel. In fine weather I prefer going into the fields.

I come home to dinner and invariably attend public worship in the afternoon. I take tea and then go out to walk. I never play at marbles on Sundays; but many go out of the town to be out of the way and play at marbles, which I think is bad.

About a third of the people frequent public-houses on the Sunday evenings, but most of the others go to chapel. I do so. The men who do not go to church or chapel are not so steady as the others, and are drunkards, and their families are not nearly so comfortable.

I was at a Sunday-school, but did not learn to read. I did not pay attention. At Sunday-school the boys do as they like and are not afraid of the teachers. I do not know Lord's Prayer. I learned very little. I know very little about all these things. I wish I did.

I allow my mother for keeping me 15s. a-week. A little before we leave off work we take off our wet shirts and dry them and we put the on when the work is done.

No.28 - Peter Woodford.

I am 23 years of age. I went to the rolling-mill about 6 years of age. I had 4d. a-day at first. I continued about 12 years at the rolling-mill and as I got bigger I was put to harder work, and got more wages, until at last I had 3s. a-day. Five years ago I took to the forge and at first had 3. a-day and gradually got onto 10s. a-day. I am very strong and the work requires great strength. A man can work at the shingling till about 45, but after that it is too heavy for him. The work is fatiguing, more particularly when it is very hot. The work burns cloth all to pieces and the flesh. The work keeps a man thin; it sweats him down. There a no men in the iron-works who drink only water. There are very little complaints of masters in this part of the country. There is a savings bank but very few of our men save anything. I let mine go as get it. I never got any learning.

No.29.- Michael James.

I am in the iron trade and am a roller. We do not work on Sundays, and very seldom on Mondays, except to do odd jobs, that is, to repair parts that are wanted. There is no open operation in the iron manufactory done on Sundays, except by those who blow the blast furnaces. The men who are obliged to work on the Sundays at the blast furnaces feel it a hardship and much rather would cease working. It is a great hardship never to have a day free from toil. I began at 7 years of age and worked at the rolling-mill of Old Park in Shropshire. I returned the hot rolls to the roller. I began at 6 in the morning in summer and worked till 6 at night. We had no time for breakfast except what we could catch and we had an hour for dinner. I afterwards worked at Horsehays, under the Coalbrookdale Company, where we had half an hour for breakfast and an hour for dinner and we left off at the same time at night as before. We did as much work and the allowance of half an hour to breakfast did no harm to the masters. I continued returning the rolls till about 18 years of age. I then went to the other side of the roll and became a roller. I think 7 is too early an age to set boys to this work. It is too much. It hurts boys. It hurt me and kept me less in growth than I otherwise should have been. The heat hurts them as much as the labour. The boys sweat all day, the same as a collier in the pit. The boys are never off their legs. They do no meet with many accidents. The work in the coal-pits in much more dangerous but accident may happen. Boys are often obliged to leave their employment at the rolls and go to something else. There are not many boys who go to work so early as 7 or 8. The iron manufacture is carried on in much the same way in Staffordshire and in Coalbrookdale. We work in this part generally from 6 to 6 but have no regular time to stop. We take our refreshment as we can. We are paid by the piece.

No.30 - Matthew Chumbley.

I am warehouseman at the iron works in Spon Lane, West Bromwich. I am a teetotaller. There are a hundred teetotallers in West Bromwich. I know several men who work at the forge who are teetotallers. They say that they have as good health without drinking fermented liquors as other people. They are quite as well. I know three shoemakers who are teetotallers. I know one tailor who is a teetotaler.

No.31 - Henry Duignan.

Has been fifteen years an assistant overseer and is now superintendent registrar and clerk of the Walsall Union. He believes that the colliers use their apprentices well. The union binds

many boys as apprentices to colliers and he considers that it is commendable so to do. The boys usually go a short time on trial and on coming before the guardians before being bound, usually state that they are well fed, well used and like to work under ground very well. He never knew of a single instance of cruelty. Some of the children go on trial at eight and are bound at nine. Some of the sons of the colliers themselves go down to the pit at that age. No sooner are the children at the age of eight or nine but there is a demand for them. The union usually gives an outfit of clothing to the apprentice, or about 15s. to procure it. The apprenticeship extends to 21 years of age. He is of opinion that it would be highly beneficial if there were superintendents to inquire into the condition of the apprentices and see them once a year but it ought to be a person no way connected with the union or the Poor Law. He does not recollect any instance of an apprentice being returned back on the union from any personal injuries got in the collieries. The colliers are exceedingly kind and make collections of any of their number who may be injured. Parents not receiving relief from the union bind their children as apprentices to the colliers. Lads in the collieries gain sufficient to maintain themselves at the age of 14 and there are some instances of their living away from their parents in some other house. In the town lads working in shops at eight or nine get 1s. 6d. or 2s., at 11 get 3s, at 12 get 4s 6d. to 5s.

Mountrath Street, Walsall, December 2, 1840.

Sir,

When I had the pleasure of speaking to you yesterday on the subject of apprenticing children, you thought it would not be amiss to put my opinions in writing. In doing so, I would at first contend that the provisions of the 56 Geo. 3, cap 139, under which law generally poor children have been apprenticed, are not sufficiently extensive the enactments merely point out the mode of binding and that it shall not be lawful to bind a parish apprentice in any other way, the master teaching the boy the trade he follows and affording him all the necessaries of life till he has attained the age of 21 years. When, as in former times, the business of a mechanic required much ingenuity and skill in performing the art and mystery of such business, long experience and application were necessary but now that lathes, stamps, presses and other machinery of the most ingenious description, have in part superseded the skill formerly required to complete a piece of mechanism and in the distribution of such labour one branch only is generally performed by one person, there is no need of long servitude.

I am not aware of a single trade in this county requiring the practice and experience even of five years to obtain a knowledge of it. When the apprentice arrives at the age of 16 or 17 years (the age at which he can earn sufficient to support himself) he is frequently at variance with his master and even though punished by the magistrates for misconduct or neglect of service his continued annoyance and the quarrels created, break up the existence of the indentures by the master consenting to allow him to go home or to work for himself and not afterwards claiming his services. By a shorter servitude some of the advantages would be, where a widow is left with six children, three above and three under nine years of age, the oldest being boys may be and are generally put out parish apprentices. These under the present law are to remain with their masters for 9, 10, or 11 years, during which periods they have no means of being of any assistance whatever to their widowed mother or her young family. The masters to whom they were bound are the only persons benefited by the long period of service. My experience has led me to observe that the most valuable situations in the way of apprenticeships and to the best trades too, are offers to take the boys of poor parents as out door apprentices, a mode not applicable under the statute before mentioned. It may be argued that those opposed to this argument, that a boy being free from the control of his master at the age of 16 or 17 would fall into vices he would have escaped if he had continued with his master or till 21 but I deny that such danger exists and I offer as a proof that those who between the ages of 17 and 21, whether employed in agricultural or commercial labour from year to years, do not fall into more vices than those do who are apprenticed for the long period.

I may also be told that the consequences of early marriages would prove an unfavourable result but an apprentice marrying is by no means an uncommon event and generally the time and the indentures are given up when that happens, because the services coercively obtained are seldom if ever of any value.

A young woman is instructed in the business of a milliner or straw bonnet maker in six months for her labour and a sum less than £3 and these are businesses requiring superior skill. Similar engagements, if it were lawful, might be made by poor persons for the instruction of their children (under the direction of boards of guardians or not) if it were not for the existence of a long-dated indenture and by returning to form a part of his mother's family he relieves her from the degrading state of poverty into which she had fallen by the loss of their husband; increasing her weekly income by the knowledge he had obtained under his recent engagement. And if it be said that a youth would refuse to contribute to his mother's family's support, allow me to say that

such want of parental and filial regard created under the administration of the old Poor Laws is fast disappearing and under the excellent provisions of the new, such regard is but seldom seen to be severed.

If I have not made myself clearly understood, I shall be most happy to explain, and I shall at all times feel much pleasure in contributing any information or assistance in my power to promote the laudable design of the commission in which you are engaged.

I remain, &c.
(Signed) HENRY DUIGNAN,
Clerk of Walsall Union.

Mr. Homer, the relieving officer of the Wolverhampton Union, confirmed the evidence of the clerk of the union of Walsall as to the apprenticing of children. He stated that they were in great demand and in fact there were only two boys now in the house, whom some colliers were endeavouring to obtain and the subject would be brought before the guardians at their next meeting. The children usually go on trial and on becoming nine years of age are bound for 12 years, being until they are 21 years of age complete. It was always so done. The boys were exceedingly well used. It was a gain to the masters to have the children bound for so long a time.

No.32 - John Penn.

Age 36. Worked in a colliery when 10, and continued till 21. Is now a constable under the magistrates of Wolverhampton and his chief business is to go about the collieries and iron works with a view to deter disorderly characters from doing mischief. Has known instances of the tacklings or chains of the engines being put out of order, and the consequence was that when men were going down in the morning they were precipitated out and killed, as many three or four at a time, but none lately. The apprentices from the poorhouse are usually bound about nine years of age and until they shall be 21 years of age. In some pits are four or five boys, in other pits there are 23 or 24. Does not know why the apprentices a bound for so long a period as 12 years. It is a gain to the masters. About five months a there was an explosion in a mine near West Bromwich and nine men were killed and two three boys, with a horse or two.

When an accident happens at a pit, either to the people who are in it, or anybody falls down the shaft, the pit is not worked any more until after the funeral. Men indeed go down and give food to the horses, but that is all. When a man is injured and afterwards is able come out, he comes on the reckoning-day and sits near where the money is received, and every man of the pit cheerfully pays him 3d. a-week out of his wages, and every boy l.5d.

It does not signify if the pickmen are absent a day or two, as they can get sufficient coal down to enable the other men to go on without them. In pits where the reckoning-day every Saturday, the men usually come on Monday and work till dinner-time and then the come up and sit down in the hovel and the butty gives them 5s worth of beer, and the drink the liquor and then go home. Perhaps a young workman who has no family may go with a companion and they go and drink a little more together.

He has found the colliers to be very easily managed. He is never afraid of them. After some drink they may be a little troublesome but it is nothing very serious. If they quarrel over their drink, and get to very angry words, they rise, have a buff or two together but that is all and when the constable who has been sent for comes, he finds them sitting drinking together in great harmony. About Wolverhampton the pitmen are allowed drink only at dinner time but not after their work but in the country, on the other side of Bilston, they have drink also after their day's work. The apprentices are all well used by the colliers and there are no complaints. He has never known any boys sent to work down in the pits before nine years of age.

No.33 - John Neve.

Is an iron-master at Wolverhampton, the furnaces being within the parish. Has been so as a furnace master for four years. Where the materials are very good, the furnaces may stop some hours on the Sundays without much inconvenience and some iron masters stop six and some even as much as twelve hours and say that it does not injure them. But in our works it is otherwise. The experiment has been tried and made with care and with desire to succeed and the consequence was, that the iron for a day or two afterwards was of inferior quality and to have continued this plan would have reduced the quantity made, by one fourteenth per annum. The persons employed on a Sunday about a furnace are about ten, of whom two are boys. When

from accident we have been obliged to stop six hours there has been a reduction in the make, but not any injury to the quality, at least to any great extent.

No.34 - Richard Bradley.

Is agent for Sir Horace St. Paul and has under his charge six iron furnaces in the neighbourhood of Tipton and has been so engaged for about 14 years. He has three several times made the experiment of stopping the furnaces on Sundays and on each occasion continued it for several weeks, for about ten hours, from 7am. to 5pm., and with every desire to succeed and thinks that he should have done so but for the obstinacy of the men. Before the visit of the Sub-Commissioner, he had given directions this day to stop three furnaces to-morrow (Sunday, January 3, 1841,) with a view again to repeat the experiment with a fourth set of men, with full hopes of succeeding. Sees no insuperable obstacle if the men car be got to do their best endeavours. Occasionally when the furnace is in a bad state it would be impossible to stop without great loss and inconvenience.

No.35 - William Baldwin.

You are an iron-master, having your works' near Bilston? - Yes.

How many hours on the Sundays are your furnaces suspended? - Eleven hours, from 6 in the morning to 5 in the afternoon.

Do you experience any loss by the furnaces being suspended? - We lose in time but nothing else, except upon particular occasions. When the furnaces are in a bad condition we should lose if we were to stop, but that with us is very seldom. We have worked only two Sundays during the last 12 months. If the furnaces had water beneath them they might suffer by stopping but I know only of one pair of furnaces of that sort in this part of the country.

No.36 - William Bagnall.

You are a partner in the firm of John Bagnall and Son, iron and coal masters in Staffordshire? - Yes.

How many blast furnaces have you? - Six.

Do they stand on Sundays? - They stand from casting-time in the morning till the evening, about 9 hours.

Do you sustain any loss thereby? - None: we consider none. Our men come refreshed on the Sunday and are relieved from the double turn, which involves 24 hours continuous labour, which necessarily has the effect to injure the men and make them less fit for their work.

Are there any instances where you have been obliged to go on? - Sometimes it will occur that the furnace is in such a state that it is necessary to go on but such a thing is of rare occurrence. With our three furnaces at Gold's Green we have not had such a case for the last twelve months and in respect to our other three furnaces we have not had more than one case, at all events if we have had so much I am not quite sure.

Is it your opinion that it is practicable to suspend furnaces on Sundays generally? - I consider it as perfectly practicable and that this is now ascertained from experience beyond a doubt. The men derive comfort from stopping and certainly our men would be very reluctant to be again brought to regular labour on the Sundays. Where they have shown any reluctance to suspend it has been because they considered that their wages would be proportionally diminished thereby.

No.37 - Isaac Guest.

You are the keeper of the furnaces of Messrs. Lloyds, Fosters, and Co., at Old Park, Wednesbury in Staffordshire? - Yes, for ten years.

Do the furnaces stand on Sundays? - Yes, from 6 in the morning until 5 in the afternoon.

Do you consider that it occasions any loss? - I do not. The men are paid by the number of tons made and they consider that they are not losers at all by the stopping. Our double turn formerly was to go on Sunday morning and remain at work until Monday morning, the whole 24 hours but now, instead of coming on at 6 in the morning, they come on at 5 in the evening. The double turn was very unhealthful. After a man had worked six days week then to come on the seventh and work the whole 24 hours was very destructive to the constitution and very much injured us. I think we do as well and we make as much iron as before to a mere trifle, only very

little difference. The men are all very thankful for the change and would be very sorry if ever they should have to go to work on the Sunday morning again. The wife of this witness zealously corroborated his evidence.
