

Number of tons of coal produced for each fatal accident.	180,747
Number of tons of coal produced for each non-fatal accident.....	46,860

On comparing this summary with that of last year it will be seen that the amount of coal produced, in tons, has decreased over twelve per cent., while the number of employés has increased nearly five per cent., this coupled with a decrease of twelve per cent. in the average working time, shows that the year just closed has not been one of prosperity to the employés. The decrease in production is due to several causes; first, during the months of September and October, when all the mines were running steadily, there was a scarcity of miners in the district, some of the mines only had one-half of the number required; second, the mild winter greatly reduced the amount of coal required in both the railroad and merchant trade; finally the largest portion of the mines in the district have been idle for the last two months of the year, on account of a reduction of ten cents per ton proposed by the operators, the miners resisting the same up to the present time, July 1.

New mines put in operation during the year.—In Grundy county the Wilmington Star Coal Co. No. 5 at Coal City, Thomas E. Goode, Alexander Watson and James Cryer, the latter formerly in company with George Wren, at Morris; in LaSalle county, Emerson Hakes has put his shaft down to the lower seam, or No. 2 of the geological section at Rutland, and Howe & Harrison, E. B. Dawson and Sylvester Kimes have opened mines at Streator; in Will county, the Chicago, Wilmington and Vermilion Coal Co. has a new mine, M., at Godley, and in Livingston county the River Bank Coal Co. has opened New No. 2 at Streator.

New mines, and others not in operation during the year.—In Grundy county, Thomas Walsh, at Morris; in LaSalle county, F. Buzzard and J. Crewe, at Streator; Halderman & Co. and J. Clarks at Lowell. Mr. Harts' mine at Garey was operated a short time, but was stopped on account of bad roof; in Livingston county Eli Cope, at Streator; in Will county, the Chicago, Wilmington and Vermilion Coal Co. "N" shaft, about one half mile northwest of their "L" mine, has been sunk, and the bottom pillars cut around in readiness for the winter trade; the Co-operative Coal Co. have just reached coal with another shaft about half a mile north of their old one at Braidwood.

Abandoned mines.—In Will county, the Chicago, Wilmington and Vermilion Coal Co. abandoned their "L" mine on account of the seam rising to the north, and cutting out the soapstone, leaving only about four feet of soft clay between the hard pan and the top of the coal, this was not only very expensive to operate, but was also attended with danger on account of water collecting on the surface, over this part of the mine, after heavy rains.

Escapement shafts put down during the year.—The Streator and Wilmington Star Coal Co. at their No. 2 mine, also the Wilming-

ton Star Coal Co. at their No. 5 mine at Coal City, Grundy county; in LaSalle county, the Wilmington and Streator Star Coal Co.'s No. 2 at Kangley, and Sylvester Kimes at Streator; in Livingston county, John Edwards, at Streator; in Will county, the Miners' Coal Co. at Braidwood, have theirs nearly completed; the Chicago, Joliet and Streator Co. is still under the control of the Circuit Court.

Improvements during the year.—The Chicago, Wilmington and Vermilion Coal Co. at their No. 1 mine, Streator, have put down an air shaft about nineteen hundred feet in a westerly direction from their hoisting shaft, this has been the means of greatly increasing the volume of air in the mine, as the distance traveled by the current is now only about one-half of what it was formerly. A stairway has also been put in, and it is now used as a traveling way by the miners in going and returning from their labor; it is a great saving in time, and is also less dangerous than traveling by way of the engine plane. The Wilmington and Streator Star Coal Co. at their No. 1 mine, Kangley, have put in a second fan for ventilating the east side of the mine alone; on the west side they have made connections with Scott's old shaft, which is used as a downcast for ventilating purposes, thus reducing the airway to one-half of its original length. It is also equipped with a stairway to allow the miners, who wish, to travel that way. The Union Coal Co. at Peru have taken advantage of the present suspension of work, and are busy repairing and strengthening their tower, etc. M. J. Barrackman & Son, Streator, on rebuilding their tower after it was burned down, put in machinery for hoisting which enabled them to largely increase their output during the year. John K. Stewart, Braidwood, who purchased Young and Wilson's mine, also put in machinery for hoisting, but as the coal land leased is pretty well exhausted, it would perhaps have been better had he retained the horse-power. Carney Bros., Marseilles, have purchased the shaft at that place, and have repaired the boilers and machinery, and are also making many improvements under ground.

New Mining Machines.—Several experiments have been conducted in the district, during the year, with the Sperry Electric Machine; the principle of this machine is the same as the Harrison; the only difference between the two, is in their mechanism to suit the different motors; the former has been tested in both long-wall and pillar-and-room systems, and although working at a disadvantage in these experiments, through defective mechanism, it compares favorably with the Harrison machine in the number of square feet undercut in a given time; it is also claimed the operator can control it easier, but the great difference in the cost of erecting, and maintaining a plant to supply the power required for the Harrison machine, is where this machine will show its advantage.

Mr. Kangley, Superintendent of the Wilmington and Streator Star Coal Co., has been experimenting for some time, at No. 2