While Swedish Scientist Hermelin reported that two miners could supply a BIRD'S APPENDIANT Furnace, at Hopewell Mark Bird paid five miners. These men were not designated as miners in their personal account headings, but identifed by credits under the "Work and Wage" account. Further, Miners Bell, Hunter, Mc Lean, Shuder and Windling mined ore at unstated locations; neither Hopewell nor Jones Mines, definitely Bird porcerties, were mentioned. Finally, these accounts provide ONLY DAYS OF WORK, not tonnage mined, washed, hauled and smelted.

THOMAS BELL (p 39,136) was a part-time miner, earning his livihood by keeping or filling the furnace, by making charcoal as well as mining a month and 12 days. He used tobacco moderately, bought unknown (clothing) items from dealers of the area and consumed but two pints of nine pence rum and three of whiskey at during 1784. He definitely coaled with Master Collier Thomas Sims, and while he purchased an axe, he had no credits for woodcutting. Earning 7.2.1 in unstated # time, he probably coaled two months, based on earnings of other Sim's colliers. This coaling work also explained the blanket, French pot and skillet which Bell TOTHE BIRD STORE, bought and resold / Credits from the Furnace founders strongly suggested that Bell filled or kept the fernace, earning 8.16.1, over \$22, through this work. (No <u>Journal</u> wage comparisons for keeping and filling exist.) Later, he definitely filled for two tWelve-hour turns, earning 4/6, about .54. He paid a Shilling, about .13, for a single day's board at this same time. Next, Bell m earned 16.16.0, about \$44, by a"Work and Wages" credit. At this unknown job, he had earned a ten Shilling wage INCREASE for the last twenty days of the four months and 16 days credited. This pay was for neither filling nor keeping since the furnace founder paid these men in Bird's and into the Brooke and Buckley period.) Finally, Bell worked at the Mine for a month and 12 days, adding 3L 15 for mining an unstated tonnage. This pay was about 9.70 a month. or about \$15 for the whole time at the mines.

* MONT. p229. WHETHER HE VISITED HOPEWELLORLONESMINES

In/his coaling -keeping filling work cannot be broken into months and days, but atxiess at least be worked just over six months by stated <u>Journal</u> time accounts. He paid for/thtee pairs of shoes and for tailoring three times, buying ONLY 1 3/4 yards of Duffel at 10 Shillings a yard, from Bird. His Harital status is unknown and he paid no taxes. But his flour purchases, 434 pounds, aberaging 8.3 pounds weeklym was about half of Miner Shuder. Those for beef, pork and bacon averaged about 1.5 pounds weekly. Other food purchases included six mackeral at 6 pence each, three fish, ten pounds of sugar and five of coffee. The sixty eight pounds of beef he ate cost four pence a pound. His total earnings were less than 40 L, about \$106 for the pear, but he dwew cash five times and was near "even" at the accounts end.

NICHOLAS HUNTER(p 19, 124) like others bought neither cloth nor clothing, but did need two pairs of shoes. With six quarters(28 pounds each) of rye and white flour within a month, he had a family. He bought a bushel of feed for his horse in in the same time. He drank rum costing 13 pence a quart and used tobacco moderately. The purchase of 133 pounds of beef at three pence and an empty barrel near the same time suggest beef corning. He further economized by buying the CFFAL from the same Hopewell butcheving. This gave him all the tallow(candles and fat lamp supply) head meat, brain, tongue, heart, liver kidneys, stomach (tripe) and tail. He probably owned land since his tax was ten Shillings, about \$1.30. He earned extra money by weaving mine baskets for a Shilling each.

Non-winter mining is suggested by his work payments, 10 months and $7\frac{1}{2}$ days in over a year, of which six months was probably earned at the mine. At Journal's end, he was about NINE POUNDS AHEAD, about \$20. Recall his three pence beef:

JOHN McI FN(p 17, had a family since he purchased three quarters of flour, in a month; 23 pounds of pork at six pence, and 29 of beef at $3\frac{1}{2}$ pence. Being paid 6.15.0, almost \$18 for two months and 2 days on April 13, 1784 suggested NO m mining work in Jamuary 1784. Records credit him with No woodcutting pay in this

period. His monthlypay of 3L5 was 65 shillings, about \$8.50 a month. His next wage credit in Ceptember suggested a five Shilling a month RAISE, paying him for 2 months 1 \frac{1}{2} days at 2 L 10, seventy Shilling a month. A charge for three bushels of potatoes in April at 36 pence a bushel probably meant that his own crop was exhausted. In the fall, he washed 76 loads of ora at two Shillinga and load; worked for Master Collier Sims five days and did cut eight cords of wood at 27 pence a cord. Hesused tobacco very moderately, based on his Hopewell purchases, and drank but a single quart of whiskey in 1784. He probably lived near the only 3\frac{1}{2} yd linen, no clothing, nor tailoring mines and bought no shoes, riving markershing from the Hopewell store.

He did draw cash and spent page 1 pounds at local stores and may have Pott's bought from the Warwick Mine store. Mc Lean was about 12 Pounds "ahead" in 1985, about \$33.

PETER SHUDER (p 29,126) definitely had a family, proven by two entries "Cash to wife" and the purchase of six quarters of flour (168 pounds) within a month.

He owned a horde, used tobacco moderately and bought his sole whiskey, a quart most of at 15 pence, near Christmas 1784. As/the other miners had, he bought no cloth, clothing nor paid tailor McCormick through Bird's store. He did buy three pairs of shoes and a pair of stockings and bought from John Gray. A blanket flour at 13 Shillings was the sole house item bought. His/purchasescould have been near delivered to him/xx the mine by a returning ore wagon, which probably had knewx Sending one's wife to the store was also economical. Recall the 12 hr day, brought his orders to the store./He did NOT earn any extra money by woodcutting

suggesting that all available wood at the two mine tracts of 29 and a hundred acres had already been coaled by Mark Bird.

Mining pay totaled over nine mouths for 1784, earning Shuder 35.14.14, about \$94. "Work", not specified as to type, gave him an additional one month and seven daysand 5.1.6, about \$15. The Nark Bird month is unknown, but most likely was 26 days as used by Brooke and Buckley. Schuder's total earnings were almost 45 L, about \$119. But Bird owed him over 11L; Schuder had "saved" about \$291

Shuder's purchases reflect every worker's life in 1784:

White flour	872 pounds 56 "	Salt	12 qt
Rye flour	56 "·		ce 4 lbs
Coffee	5 "	Beef	80 3/4 1bs
Sugar	10 "	Pork, 6 pen	ce 9 1½ lbs
B l anket	1 ea	Mackeral	4 ea
Shoes	3 p r	Horse feed	5 bu.
Stockings	1 pr		

Whether any miner bought EVERY food item from Bird is unknown. Based on the above purchases, Shuder and his family of un nown size, bought on a weekly basis: 18 pounds of flour and 3.1 lbs of beef, pork and veal. For the entire year of 1784, he purchased CNLY five pounds of coffee, ten of sugar, twelve quarts of salt, and five busheld of horse feed. As stated, earlier, his other potential food sources are unknown.

GEORGE WINDLING (p 47, 117) was a neighboring/farmer/ tuxpaxexxxxx worked as a miner for Mark Bird. Hopewell's blacksmith applied ten shoes for his horses, reapired his plow and upset his hoe. Married, his son worked with him five months and at an unstated work. He used tobacco moderately, but bought NO liquor. While NO cloth or clothing went on the books, purchases of 5.11.6/from John Gray and George Douglass (of Douglassville) may have been clothing and cloth costing abt 1.23
p rchases charged to his Hopewell account. He added a pair of shoes/to his wardrobe and/mateaketile to his home LO Sh. abt \$1.30. He also drew small amounts of cash and paid his taxes through thefurnace, 14/1, about \$1.83. Purchases of two empty barrels and 23 quarts of salt were NOT matched by either fish nor meat purchases. He probably killed pork and beef at hisfarm. He did byy over fifty pounds of beef(at 4 pence) and 170 of pork at 6 and 5 pence) plus $4\frac{1}{2}$ of bacon. xXXXXX Kisxfieurxeursbases His weekly white flour purchases totaled 2122 pounds plus 154 of rye and 112 pounds of Indian(corn) meal. These suggest a family beyond a wife and son. He also bought 17 of sugar and five of coffee.

As a miner, he worked six months and five days, earning 25.9.11, about \$66.50.

He and his somunder "Work and Wages" earned 18.11.1 for just over five months over \$48 more.

at an unstated job, He did NOT cut any wood. Windling then worked just over

11 months in 1784 and saved about 1.9.42, mxxx about \$3.87. Recall he drew cash, accounts charged/to other merchants, and paid his taxes, and his beef cost him four pence a pound.

NO ORE TOTAL AVAILABLE

While the <u>Record</u> lists at least five miners, NO ore consumption figures are in the account. No is there any hint on the amount of ore mined by the day.