After the War for Independence our country staggered under a great debt. The people were impoverished. The nation's credit had been stretched to the limit: there was no money with which to pay debts, nor could it be coined. The country's finances were exhausted. Some means had to be devised for raising money to meet the already accrued indebtedness and to pay the current expenses of government.

The tariff bill of 1789, passed to meet these needs, was insufficient. Alexander Hamilton then recommended an extension of both import and excise duties. Among the products thus made taxable were distilled spirits.

The excise law of 1791 was passed to provide the necessary revenue for the government. Under this law, spirits were taxed as follows: upon spirits distilled from molasses, sugar, and other foreign materials, eleven to thirty cents a gallon; upon spirits distilled from domestic products, nine to twenty-five cents a gallon. (1)

These new excises bore heavily upon the western farmer, who derived a great part of his income from the sale of the whiskey made from his surplus grain. Pennsylvania had had excise laws from an early date, but these had been systematically ignored by the western settlers. From 1777—the date when officers were first commissioned to collect revenues west of the mountains—to 1791, the people had treated the excise law and its executors with contempt. (2)

After the federal laws were passed, protests from Allegheny, Fayette, Washington, and Westmoreland Coun-

*An abstract of a Master's Thesis at the University of Pittsburgh. A sketch of this thesis was presented before the Historical Society, February 21, 1927.
ties increased. The hatred for the excise law became so intense that in 1792 Congress materially and favorably modified the law of 1791, removing many of the unjust clauses.

The causes of these western protests were deep-rooted in the past; some of them were products of local conditions; all were vigorous. By 1793 the western counties were peopled by settlers many of whom had come from the Old World. Of these, the immigrants from Scotland, Ireland, England, and Germany all had an inherent hatred for excise duties. This hatred was intensified by the situation in their new country. Grain was a drug on the market, but it could be "mashed" and distilled into liquor, for which there was a good market in the eastern part of the state. So instead of the surplus grain being fed to the cattle, it was converted into liquor and sold. Transportation facilities were poor, but a horse could carry twenty-four bushels of rye made into whiskey as against four bushels of the grain itself. (3) Whiskey could also be used to purchase skins and furs from the Indians, and fur-selling was the livelihood of many frontiersmen. Yet the federal government would try to tax this very liquor which supplied them with so much of their living.

The immigrants had come West for liberty and land. Their favorite maxim was "to be let alone". The ideas of the frontiersmen were also influenced by the ideals of the French Revolution. They claimed the "Rights of Man", arguing that these rights were violated by the excise laws.

Every factor militated against the acceptance of these laws by the western settlers: heredity, agricultural conditions, transportation facilities, trade, the political situation in general.

Meetings of protest were held throughout the western counties from 1791 on. The first was held at Redstone on 27 July of that year. Another important meeting took place on 7 September at Pittsburgh. (4) Petitions were sent to the government to have the excise laws repealed. The settlers threatened to unite, arm, and fight the government, and later secede. By the midsummer of 1794, the opposition had grown intense in the West. The morning
of 1 August found a force of seven thousand men assembled at the appointed rendezvous. They planned to march to Pittsburgh. (5) Washington and his government were determined that the Insurrection should be put down. The government succeeded, as we know, and the Whiskey Insurrection came to an end. "The Federal Government was not a rope of sand which might be broken at the will of any section of the country, whenever any State or part of a State thought a particular law might be oppressive." (6)

This paper presents an account of the economic conditions of western Pennsylvania as they were at the time of the Whiskey Insurrection, that we may see more clearly the background against which its history was enacted.

The Frontier Life

The needs of the frontiersmen of 1794 were simple and the means for supplying them, crude. What with the wilderness of the country, the inadequacy of transportation facilities and the danger and expense of shipment, and the sparseness of the population, the people of western Pennsylvania lived a life unto themselves. Wild beasts were shot to supply meat and skins for trading. The fertile soil yielded plentiful crops even when tilled by the crude implements then available. Machinery was as yet almost unknown. The few necessities not produced on the frontier were brought slowly and painfully over the mountains by the pack-horse. Money was scarce and there was no need for a banking system.

Yet all the people were not poor. There had been an aristocracy in the towns from the first. The towns themselves possessed an economic life of a surprisingly high degree of complexity when compared with the surrounding country. Many industries had already been begun.

In general, however, the life was very simple, in country and in town. The settlers lived from day to day, making the most of what they had.

Land Titles

The story of the land titles of the western counties of Pennsylvania goes back to the founding of the colony.
In the charter granted to William Penn in 1681, it was provided that land should be held of the king of England "in free and common socage by fealty only, and not in capite or by knights-service", yielding to the king yearly two beaver skins and one-fifth of the gold and silver found. (7) “The Charter authorized the creation of manors, with courts baron (no such courts were created), and the first and subsequent Penns set out manors such as the Manor of Pittsburgh surveyed in 1769, the Manor of Kittanning in 1769, the Redstone Settlement, 1770, and Latrobe, 1770.” (8) The Penns wished to sell the lands around the manors to the settlers. This was done by means of patents issued by the Proprietaries.

Another type of land title was the Indian Title, so-called. The policy of the Penns was to secure from the Indians quit claims to the land within the boundaries of the colony. “Between 1682 and 1784 deeds or treaties were secured for all lands within the limits of the State from the Indian tribes. Several penalties were provided if any individual attempted to settle upon or purchase lands which had not been quit claimed by the Indians to the Proprietaries or the State.” (9) This rule was violated from the very first by the pioneers, many of whom claimed land by the Tomahawk Right. These were the squatters, who held land under false titles.

Virginia, claiming the territory now known as southwestern Pennsylvania, issued many patents to land in Washington, Greene, and Allegheny Counties. By the settlement of 1779, it was provided that preference should be given to the first settlers and patentees, “whichever of the said States” they may originally have been under. (10) In this way, settlers received title to their land from either Virginia or Pennsylvania.

Still another type of land title was that gained by purchase of Depreciation Lands. By an act of 1783 all lands north of the Ohio River were divided into Depreciation Land and Donation Land. (11) The former was offered for sale to the settlers.

It is seen that there was no uniform practice in securing title to land in western Pennsylvania. The types
of holdings were several and of varying validity, but all were used during this period.

**Land Values in 1794**

Farms of average size were worth from $300 to $500. (12) Improved land in Westmoreland County could be bought for five dollars an acre. (13) The Schenley Farms tract in Pittsburgh, an area a half-mile wide, was deeded by the heirs of William Penn to Edward Smith for £310 sterling, on 24 January 1791. (14) One fact stands out from an investigation of the early deed books: land was never cheap in western Pennsylvania, even in these early days. Real estate then, as now, commanded high prices.

**Agriculture**

Little progress was made in agriculture until after the Revolutionary War. The tardiness of development was due to the poorness of transportation facilities and the danger and expense of the Ohio River traffic, as well as to the poor equipment of the farmers themselves, both in machinery and knowledge. Further, competition with the slave-worked plantations of Virginia and the Carolinas was great and in favor of the latter. The farmers of the western Pennsylvania district were compelled to be content with raising only enough or a little more than enough for their own consumption and turning their surplus into whiskey.

The country of western Pennsylvania, though hilly, was fertile and well adapted to agriculture. The chief crop of the four western counties was grain. (15) Corn and wheat seem to have taken the lead, with rye a close second. Corn and rye were raised primarily for the distilling industry. (16) Flax and the Irish potato ranked next. “Buckwheat, millet, oats, barley, hay, peas, tobacco, and melons were also raised.” (17)

The farming methods were very crude. The ground was prepared for planting by a wooden plow; some of the poorer farmers even used thorn trees for this purpose. The plow, whatever its construction, was pulled by oxen or by horses. Horses were used only in the later period and then by only the more prosperous. Seed was scat-
tered broadcast by hand and the grain, when ripe, was cut with a sickle. Threshing was done with a flail or the hooves of oxen. (18) When the flail was used, threshing occupied most of the farmer's winter time. (19) Practically nothing was known about fertilizers or the rotation of crops. The frontiersmen used their brawn more than their brain. "With the exception of plowing and harrowing, practically all farm operations at the end of the eighteenth century were performed by manual labor with the aid of very crude and relatively ineffective tools. (20)

Animal breeding was introduced at an early date. Horses, sheep, cattle, and hogs were raised. While much progress was made in the breeding of horses, there was very little improvement in the hog and the sheep. Western Pennsylvania may claim the honor of introducing the heavy Conestoga horses, bred by these early farmers. Jockey horses were introduced at the same time, for horse-racing had become a great amusement. (21)

**Labor**

People from all walks of life were to be found on the frontier. There were Indians, hunters, traders, troops, adventurers, mechanics, professional men, and the cultured aristocracy. (22) Most of the members of the last-named groups gathered in and about the towns. Unskilled labor was scarce and wages were high. This fact was cited by the western farmer to help explain why it was necessary for him to make liquor, one of his most important media of exchange. Only the wealthy merchants and farmers, however, could afford to hire men to do their work. The majority of the settlers had small establishments, industrial or agricultural, and did their own work themselves, or with the aid of their families.

No labor or trade-unions existed at this time. Such organizations as did exist were of a general character and were known generally as Mechanical Societies. One such was organized in Pittsburgh in 1788, and another, in the village of Washington. (23) The societies purposed to improve the conditions of the working people, to induce settlement in the towns, and to attract manufactures to their
Membership was not restricted to one trade, but inclusive of all the workers in town who cared to join. No attention was paid to wages, as they were set by mutual agreement between master and employe. In general, these Mechanical Societies partook of the nature of a guild or social group.

Sources for the price of labor, skilled or unskilled, are few, inasmuch as the wage was determined privately by employer and worker. Furthermore, there was no large scale production: most of the tradesmen worked in their own shops and for themselves.

From what evidence we have, it would seem that the price of common labor was high, even for that time. Packhorse drivers received fifteen dollars per month (25), while privates in the army received six dollars per month. Corporals were paid seven dollars, and captains, thirty dollars for the same period. (26)

All labor was not free, however. Indentured servitude had been introduced very early and was very popular in western Pennsylvania. Redemptioners were common in Westmoreland County, especially in the river districts. (27) All who could afford it, had such labor. White workers were preferred to negroes (28) and it was considered desirable to have them bound. Indentured servitude lasted to a late date in the western counties.

Child apprenticeship was also popular. Practically every trade apprenticed children, especially boys. On the whole, the children were humanely treated, for they were protected by the Commonwealth. An indenture signed in 1789 will show how the masters were required to treat their apprentices, and will give information as to the length of servitude, considerations, and the like (29):

This indenture made the thirteenth day of March in the year of our Lord one thousand seven hundred and eighty-nine, Between D. A. Conyngham, Jacob Shoemaker, Jr. and Samuel Mechlin, managers of the House of Employment, of the one part and Hugh Ross of Pittsburgh in Westmoreland County, Rope Maker, of the other part,
Witnesseth that the said managers by and with the consent of William Pollard and Alex Tod, two of the Justices of the Peace of the City of Philadelphia, whose hands and seals are here-
unto put according to the form of the Act of the Assembly, for
the Relief of the Poor; have put Patrick Flynn, an orphan aged
eighteen years, an apprentice to dwell with, and serve Hugh
Ross, his lawful executors, administrators and assigns, from the
date hereof, for and during the full end and term of three
years next ensuing in all lawful and reasonable service and the
said Hugh Ross, his executors, administrators, or assigns, dur-
ing the said term, shall find and provide for the said appren-
tice sufficient meat, drink, apparel, washing and lodging, and
shall teach or cause him to be taught the art and mystery of
rope making and shall every and each winter during the term
of his apprenticeship give him three months evening schooling
for the purpose of learning him to read, write and cypher and
at the end of said term shall give him two complete suits of
wearing apparel, one of which shall be new.

In Witness whereof the said parties to these presents have
interchangeably set their hands and seals the day and year
above written.

<table>
<thead>
<tr>
<th>Wm. Pollard</th>
<th>Seal</th>
<th>David H. Conyngham</th>
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<tr>
<td>Hugh Ross</td>
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<td>Jacob Shoemaker, Jr.</td>
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<td>Alex. Tod</td>
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<td>Saml. Mechlin</td>
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Negro slavery existed in Pennsylvania at a very early
date, on the pretense of a scarcity of labor. (30) An act
of 1780, drawn up to abolish it, failed to accomplish its
purpose (31), and the institution lasted for a long time.
But the slaves were treated well and were not very num-
erous at any time. The relative scarcity of negroes was
due both to economic conditions, which did not favor the
plantation system or large scale production, and to the in-
herent dislike of the frontiersman for slavery itself. (32)
A slave woman sold for approximately one thousand dol-
sars in Fayette County in 1794. (33) It would seem that
this price was representative of the prices then current.

In 1792 there were recorded in Allegheny county 159
slaves; in Washington County, 263; in Westmoreland
County, 128. (34) Many of these, especially the women,
were house servants, in which capacity they were preferred
to the whites.

As stated before, the slaves of western Pennsylvania
were treated fairly humanely. They were protected by the
Commonwealth from gross ill usage. But if they ran away,
and many did, the same Commonwealth ensured their re-
turn. "Slavery took root in the western counties and
lingered there longer than anywhere else in Pennsylvania." (35)
 Prices

The earliest records of Pittsburgh and western Pennsylvania show high prices. The people here, living in a land of plenty, have always paid dearly for what they have bought. Letters and travelers' memoirs state that the prices of Pittsburgh were higher than those anywhere else on the frontier.

One list of current prices, published in the Gazette of 19 April 1794, shows among other things, whiskey selling at 22s 6d the gallon; corn, 30s the bushel; potatoes, 60s the bushel; butter, 4s 6d the pound; eggs, 2s 9d the dozen; and vegetables in proportion. In another place, hay is quoted at 50s the ton and flour at 25s the barrel, while fresh pork brings 3d the pound, wholesale. (36) At retail, mutton sold for 4d the pound. (37) The lists published indicate that the settlers lived well, and that many tables were supplied with luxuries.

 Mercantile Business

Trade began with barter between the first hunters and the Indians, and by 1794 was well established at Pittsburgh. "The establishment of Fort Duquesne in 1754 and of Fort Pitt in 1758 insured the permanent location here of stores with general lines of merchandise." (38) At the time of the Whiskey Rebellion, Isaac Craig and Stephen Bayard had prosperous stores in the town. Many and diverse articles were brought over the mountains and sold to the settlers. The Gazette for this period shows long lists of commodities, many of them brought from overseas, which were offered for sale. The fur trade prospered and, with it, business in general. Merchant princes arose in every town of the western counties and the foundations of many later fortunes were laid at this time.

 Finance and Currency

The majority of the colonists of the early colonial period were poor, bringing very little money with them from Europe and having no credit abroad. Their only source of supply for the precious metals was through trade and shipping. (39) Confusion reigned supreme in the field of currency, English, French, and Spanish coins being
used indiscriminately. (40) This situation prevailed through the Revolutionary period and until a much later date in the western lands. In western Pennsylvania it was accentuated by the introduction of the old Continental money, Virginia money, and money from New York. This is illustrated by an advertisement in the Gazette of 7 December 1793, offering for the return of runaway negroes twenty pounds, Virginia money, or one hundred dollars. A great deal of Spanish currency came in by way of the Ohio River trade; English and French money came from the eastern part of the state. The deeds recorded in 1794 indicate that English money was used the most.

The Federal Government did not begin to coin money until after 1792. This beginning did not end the confusion in the west, but rather increased it for the time. United States money was scarce on the far side of the Alleghenies until the beginning of the Nineteenth Century.

It may be said that money of any kind was scarce in the west. This was due to the prevailing poverty of the settlers, itself an effect of the inadequacy of transportation facilities. A writer of that time speaks for his fellows: "As for money we had no other resort than what was picked up from the emigrants to the further west, or saved from the proceeds of a venture to Carlisle, or Winchester, or New Orleans." (41) This does not necessarily imply that there were no wealthy men in western Pennsylvania.

To fill the need created by the scarcity of money, barter was resorted to. Whiskey became an important circulating medium, seconded by rifles, skins, and farm products. "What a bank-bill was at Philadelphia or a shilling-piece at Lancaster, that was whiskey in the towns and villages that lay along the banks of the Monongahela River. It was the money, the circulating medium of the country. A gallon of good rye whiskey at every store in Pittsburgh and at every farm house in the four counties . . . was the equivalent of a shilling-piece." (42) "A hundred-gallon copper still would buy a good farm, two barrels of whiskey a corner lot, a five-gallon keg a pound of powder, five barrels for a rifle gun." (43) Barter was also employed to settle accounts at the different stores, as shown by advertise-
ments in the *Gazette* and by the Day Books of the taverns. The files of the *Gazette* also show that commercial paper—bonds, bank certificates, and promissory notes—enjoyed a fairly wide range of circulation. But banks were not established west of the Alleghenies until long after the Whiskey Rebellion. The banking of that period, such as it was, was done for the settler by some lawyer, friend, post-rider, or pack-horse driver who happened to be going to Philadelphia. There was no bank in the western counties until 1804, when a branch of the Bank of Pennsylvania was established there. (44)

**Road Transportation**

Even though the great need for adequate means of transportation was early recognized, little improvement was made during the colonial period. This was due mostly to the great obstacles presented by the Allegheny Mountains. The first trails were those of the Indians who followed the paths made by deer and buffalo. After the Indians came the traders. "In the very early days there were scarcely any roads. The people who came had to find their way as they could through paths or woods, while the mountains formed a barrier which could only be passed on foot or on horseback." (45) Navigation of the Ohio was made difficult by fear of Indian ambushes. (46)

The first two routes to the West were Braddock's Road, built in 1755, and Forbes' Road, built in 1758. (47) "Forbes' Road became the great military highway into the West. For a generation this route from Lancaster by Carlisle, Bedford, Ligonier, to Pittsburgh was the most important thoroughfare to the West." (48) These early roads were very rude and, when softened by rain, made slavish going. (49)

With all these difficulties, traffic increased after 1780. There were three routes to the frontier region during this decade: Braddock's Trail, Forbes' Road (the Bedford Route), and the Northern Trail. (50) In 1785 Pennsylvania began to improve these roads, and soon a great freight traffic was to be seen crossing the Alleghenies.

After 1791 the Pennsylvania Road, following the old
Forbes' Road, was opened to Pittsburgh. (51) It soon became the most popular of all, due to its practicality and safety. Traffic increased steadily and by 1794 the route to the Ohio Valley was well established.

Goods were brought over these roads by pack-horses and by the famous Conestoga wagons. The wagons did not immediately supplant the pack horses, which were still important during the period of the Whiskey Rebellion and for some time afterward.

Transportation rates were high, generally from five to ten dollars the hundredweight. (52) A good wagon cost about ten pounds at Philadelphia, a horse, about twelve pounds. (53) Wagons and horses made about twenty miles a day. "The distance which one of these wagons may travel one day with another is little short of twenty miles. So that it will be a journey from Alexandria to Redstone Old Fort of eleven or twelve days, from Baltimore a day or two longer, and from Philadelphia to Pittsburgh I should suppose it would require nearly twenty . . ." (54)

**River Transportation**

With the improvement of the transportation facilities to Pittsburgh and the increasing number of emigrants settling farther west, traffic on the Ohio River increased proportionately, so that by 1794 it was well established. It had begun with the canoe and the dug-out; the flat-boat, which went down-stream and was never brought back, was in common use by 1780 (55), while the keel-boat, used in up-stream traffic came in during 1792. (56) The first mail-boats on the Ohio were galleys, that is, keel-boats rowed by men. (57) The boats of course varied in size, but some were very large.

River boats were propelled by wind or man power; some merely floated down the stream with the current. "A crew of six men could pilot a vessel of sixty tons . . . down-stream, but twenty were necessary to propel a boat of five tons' hold capacity by sail or oar up current." (58)

The speed of travel was not uniform, as might be expected. The current, dry weather, and the dry seasons hindered the speed, and sometimes the Indians prevented
the boat from ever reaching its destination. By 1794 two keel-boats passed regularly between Pittsburgh and Cincinnati, making the round trip in a month. "The oarsmen could make as high as one hundred miles downstream in twenty-four hours, unless delayed by discharging freight; up river the empty boat could with hard labor be 'poled' only ten to twenty miles per day." (59)

Rates were high here as well as on the roads. The return voyage was so costly that often it was not attempted, the boat being broken up and sold as lumber at its destination and the traders returning overland. (60)

Despite the danger and expense, the Ohio River trade grew rapidly and goods of all descriptions were soon to be found throughout the valley. This development was well under way by 1794.

**Industries**

The industrial life of western Pennsylvania at the time of the Whiskey Rebellion was still very simple. Most of the work was done under the domestic or the apprentice system, although some fairly large business concerns had by this time been organized. Most of these centered in the towns.

Brick making was probably the first industry established in Pittsburgh, due to the early demand for its product. There were brickmakers with the army of General Forbes in 1758 (61), and in 1789 we find the advertisement of John Ormsby to rent his brick kiln on the south side of the Monongahela. (62) The second important industry to be established was distilling, much of which was done at home by the settlers themselves. There was a small distillery on the Allegheny River near Pittsburgh as early as 1770. (63) This industry flourished until 1794. Boat making was another form of early manufacturing activity. "In February, 1777, fourteen carpenters and sawyers were set to work, fourteen miles above Pittsburgh, to build boats..." (64) The town of Elizabeth was another centre of this industry, which was in full blast by 1794.

Coal mining was begun early, especially in the immediate vicinity of Pittsburgh. In 1784 the privilege was obtained from the Penns "to dig coal as far in as the per-
pindicular line falling from the summit of the hill”, for the consideration of twenty pounds a lot. (65) When John Canon laid out the first plan of Canonsburg in 1786, each purchaser of a lot was granted in perpetuity the right to mine coal free on his premises. (66) Coal mining became from the first one of the big industries of the section.

The manufacture of iron began later, being in the course of development at the time of the Whiskey Rebellion. Manufactured articles had been made from imported metal since 1786, the year when such manufacturing began (67), but the first production of iron from the ore was begun by William Turnbull and Peter Marmie in 1789. They built a furnace and forge on Jacobs Creek in Fayette County, known as the Alliance Iron Works. (68) Union Furnace, on Dunbar Creek about four miles south of Connellsville, was built by Isaac Meason in 1790, and enlarged in 1793. It was the second in the West. (69) The pioneer iron manufacturer of Pittsburgh was George Anschutz, who in 1792 built a furnace for the smelting of iron ore. This venture did not succeed, however. (70) Iron was secured from the ore by the process known as blenching. A ton and a half of metal was considered a fair day’s yield. (71) It sold for from fifteen to twenty cents a pound. (72) In 1794, Meason, Dillon & Company were selling castings for thirty-five pounds a ton. (73)

Glass was first manufactured in 1791. (74) “In 1795 there was a small glass factory, of eight pots, established on the west side of the Monongahela River and known as ‘Scotts’, which made three boxes at a blowing, using wood for fuel.” (75)

Other industries of importance were cabinet making and upholstering, begun in 1785 (76), and rope making, begun in 1786 by Hugh Ross. (77) Hats and caps were made as early as 1786, the most of them of fur. (78) It was estimated that at the time of the Whiskey Rebellion over 12,000 hats were manufactured annually in the four counties west of the Alleghenies. (79)

The year 1786 saw the establishment of the Pittsburgh Gazette the first and for a long time the only newspaper west of the mountains. John Scull, the owner, also print-
ed and sold the various forms of legal blanks then in use, as well as some books.

Saddle making and tanning, long associated, were begun on a relatively large scale in 1788-9. A thriving tannery was established in 1790. (80) Grist mills were built at many places, to grind the wheat and corn raised in the section into flour and meal. Flour was often sent from here to the eastern part of the state. The mills were run by water power. (81) A bakery was opened in 1786 by Hugh Gardener and John Cewan. (82) A vintner advertised his product in 1788. (83)

Other industries of lesser importance were blacksmithing, weaving, dyeing, silver-smithing, shingle making, and the manufacture of soap. All these were on a relatively small scale.

In general, the industrial life of the western frontier of this period, although varied and showing signs of future growth, was very simple and dealt mostly with the necessities of the life of the section. Production was on a small scale and organization was practically unthought of.

Conclusion

This brief summary of the economic life of western Pennsylvania in 1794 gives us a fair understanding of the conditions under which the settlers of that day lived, and helps to make clear why they so strenuously resisted the excise laws of 1791 and 1792. Their comparative isolation due to the inadequacy of transportation facilities, the meagre development of domestic industry, the dependence upon agricultural products and, among these, grain in particular, the lack of ready money, and the importance of whiskey as a form of wealth, all suggest why an excise on distilled liquor should have been met with remonstrance and revolt.

In passing, it is of interest to remark that this western district was then, as now, a district of high prices.

REFERENCES
8. Ibid.
10. Ibid., p. 21.
11. Ibid., p. 28.
15. J. N. Boucher, A century and a half of Pittsburgh and her people, I, 299.
17. Ibid.
18. Ibid.
23. C. W. Dahlinger, Pittsburgh; a sketch of its early social life, p. 17.
24. Ibid., p. 18.
25. Gazette, 10 May 1794.
27. Boucher, Old and new Westmoreland, II, 112.
32. Ibid., pp. 14-5.
34. M. Carey, "Reflections on the state of the Union", "The American Museum, XI (1792), 120.
35. Turner, op. cit., p. 16.
37. Ibid., p. 434.
38. Wilson, op. cit., p. 143.
40. Ibid., p. 102.
42. J. B. McMaster, History of the people of the United States, II, 189.
43. Veech, op. cit., p. 363.
44. Fleming, op. cit., II, 288.
Economic Conditions during the Whiskey Rebellion

50. Fleming, op. cit., II, 139-43.
52. Veech, op. cit., p. 363.
54. Ibid., p. 161.
56. Ibid., p. 108.
57. Ibid., p. 150.
59. E. E. Sparks, The expansion of the American people, p. 141.
60. Coman, op. cit., p. 164.
62. Ibid., p. 197.
63. J. N. Boucher, Pittsburgh and her people, I, 290.
64. G. H. Thurston, Pittsburgh's industries and resources, p. 137.
65. Ibid., p. 120.
68. Boucher, Old and new Westmoreland, II, 159.
69. Ibid., II, 160.
70. G. K. Oliver, One hundred years of progress. W. P. H. S. Banquet Address of 1916.
73. Gazette, 11 April 1794.
74. Boucher, Pittsburgh and her people, I, 254-5.
75. Thurston, op. cit., p. 162.
76. Wilson, op. cit., p. 197.
77. Ibid.
78. Ibid.
80. Thurston, op. cit., p. 177.
82. Wilson, op. cit., p. 197.
83. Ibid.