The Stratton Independence Controversy Revisited

By Paul Mogensen

A wise old prospector once said: "Find a mine, find a lawsuit." This simple statement is as valid today as it was during the Independence Mine controversy. Mining lawsuits cover a wide range of disputes, including problems encountered under the apex section of the Mining Act of 1872, contests over grubstake agreements, and, in the case of the Independence Mine, misrepresentation.

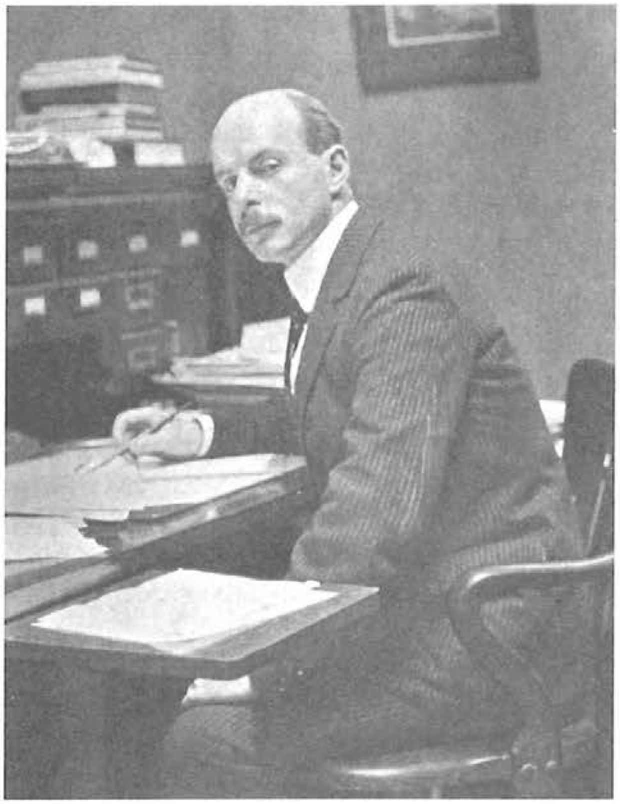
Fraud or misrepresentation involving mines and mining properties was common in western America in the last half of the nineteenth and the first part of the twentieth centuries. It might involve samples that had been salted to inflate their value. Some prospects were sold to foreign investors, who then formed a stock company for the purpose of placing a property in operation. The price of the stock could be highly inflated by unscrupulous promotion. In many cases, promoters would guarantee a high rate of return by issuing large dividends.

To make these dividend payments, the higher grade ore had to be mined first, sacrificing the long-term potential of the mine. After the bubble burst, later investors ended up with worthless stock. Such was the case with the Independence mine, located in the Cripple Creek Mining District near Victor, Colorado. The Independence controversy provides an excellent example of the dangers unwary investors faced in the mining West at the turn of the twentieth century.

The main participant in the Independence controversy was Winfield Scott Stratton, who was born in Jefferson, Indiana, in 1848. His father, Myron Stratton, was an Ohio riverboat builder who named his son after the famous general, Winfield Scott. By 1872, young Stratton was in Colorado Springs working as a carpenter. Stratton became a successful house builder, but within two years the mining bug bit him, and from that time on prospecting became his life. He continued building houses, but only to supply himself with the funds necessary for prospecting. Stratton was not a stranger to lawsuits, having been involved in several, but after his death his trustees and his sole heir found themselves deeply involved in a major lawsuit.[1]

Two of the participants in the controversy were well-know mining engineers: Thomas A. Rickard and John Hays Hammond. Rickard was born on 29 August 1864 in Pertusola, Italy, to English parents. Rickard's Cornish-engineer father was employed at the time as a metallurgist at the famous lead-zinc smelting works of Societa di Pertusula. In addition to his father, his grandfather, brother, and uncles were all mining engineers. Prior to arriving in America, T. A. Rickard, as he later became known, had been involved in mines throughout Europe.[2]

Early in his career in America, Rickard had a personal experience with a typical case of the misrepresentation of a mine property. His first major managerial position was at the Union Mine near Angels Camp, California. A promoter had sold the mine to an English company. The sale had been based totally on the promoter's recommendation, and the company retained him as manager. The investors soon learned that the promoter's only mining experience had been painting coal buckets for a railroad. The fraud was exposed and Rickard was hired to replace the promoter as manager.



T. A. Rickard.

Rickard was able to salvage some of the investment by finding additional ore and maintaining production for a short time, but ultimately the mine was shut down. Even though at first he was criticized for the mine's failure, a subsequent inspection exonerated Rickard, and he accepted a job with the mining engineer sent to examine his management. His first employment in Colorado was in Idaho Springs, then Leadville, and in 1895 he was appointed state geologist of Colorado.[3]

The American-born John Hays Hammond was a well-known mining engineer. Much of his reputation was based on his involvement with Cecil Rhodes in South Africa. He was born on 31 March 1855 in San Francisco, California. His professional education started at the Sheffield Scientific School at Yale and was completed at Freiberg, Germany. The young engineer started his career at Grass Valley, California, and then expanded his experience by working in the Coeur d'Alene region of Idaho, and in many mining districts in Mexico. Later, he worked for Barney Barnato in South Africa, then became associated with Cecil Rhodes.

Hammond joined with Rhodes in his attempt to wrest control of the Transvaal from the Boors with what became known as the Jamison Raid. With the collapse of the invasion, Hammond was thrown in jail and sentenced to be hanged. Only a payment by Cecil Rhodes' supporters bought his freedom and he was allowed to leave South Africa. One aspect of his fame was his ability to demand and receive very high fees for his work with many of the well-known mining companies of his day.[4]

Another participant in the Independence controversy was Verner Z. Reed. Reed had been the author of a best-selling novel, sold real estate, and finally became involved in the mining industry. He became associated with Stratton when he assisted Stratton in solving legal problems associated with the Portland Mine. In addition, he and his partners formed several mining companies in the Cripple Creek District, including the Moon Anchor Mining Company, the Robert Burns, and the Champion Consolidated. At the time of his involvement with the Independence lawsuit Reed was approximately thirty-five years old.[5]

The events leading up to the controversy started on 4 July 1891, when W. S. Stratton, after years of unsuccessful prospecting, discovered the Independence Mine. The controversy culminated when stockholders of the Stratton's Independence, Ltd., sued the heirs of Stratton's estate for misrepresentation during the sale of the mine. During the course of the controversy, the reputation of a well-known mining engineer was damaged, shareholders lost large sums of money when the stock price collapsed, and British investors had another reason to question the advisability of investing in American mines.

Stratton's approach to developing his mine was totally different from that of the typical prospector turned miner. Most mines at the time were placed into production with little thought given to their long-term

John Hays Hammond.

development. Mining would start at the grass roots or top of the ore body and production proceeded downward. The main purpose was to obtain wealth as quickly as possible. In contrast, Stratton carried out a very a systematic development program. The production shaft was sunk to a depth of 920 feet and a second shaft sunk to a depth of 625 feet. Levels were established every one hundred feet and over thirty-four thousand feet of workings developed the ore body.

By the time Stratton sold the Independence, it was completely developed for production. His favorite expression was that the mine was his bank. When he needed money he would mine enough ore to satisfy the need. Over half of the ore produced from the mine during the time that Stratton operated it came from this development program. From its inception on 4 July 1891 to 31 December 1898, the mine produced 41,694 tons of ore at a grade of 4.6 ounces of gold per ton. The gross value of this ore was $3,837,360. Of this production, only 20,500 tons had been mined from stopes. This development later allowed the ore body to be sampled and assayed, its widths measured, and its grade and tonnages accurately determined. Few mines being sold at the time had the systematic development exhibited in the Independence.[6]

While Stratton was developing his mine, Reed opened an office in London as a conduit to overseas investors and started dealing in mining properties. Some of his contacts in London were associated with the newly-formed Venture Corporation, which had been organized to acquire gold mines mainly in Australia, but also in Siberia and North America. Much of Venture Corporation's early financing came from Europe and later from South Africa. Reed established a solid relationship with the company and brought several properties to it. One of these was the Moon Anchor Company in the Cripple Creek District.

The events leading up to the sale of the Independence Mine to the Venture Corporation are obscured with controversy. It is unclear what took place in the early stages of the talks between Stratton and Reed. The popular concept is that Stratton was not a willing seller and that Reed had to convince him to sell his mine.

However, Stratton was a prospector at heart and had become fascinated with a theory that Cripple Creek's ore deposits lay in the shape of an inverted wine glass. The idea was that the veins of the district converged downward like the stem of a wine glass. The bonanza gold deposit would be found in the inverted glass far below. It is entirely possible that Stratton, being more of a prospector than a miner, saw this potential discovery as his greatest achievement. He would use the proceeds from the sale of the Independence to finance his search for the overturned wine glass. Whatever Stratton's motivations, we do know that he and Reed arrived at some kind of an agreement to sell the Independence.

There are many different versions of what happened next. John Hays Hammond, an engineer noted for not letting facts get in the way of a good story, especially when the story made him look good, gave the following popular version: The Venture people invited Stratton to a sumptuous banquet. At the end of the first course, they offered Stratton $5 million for his mine. As dinner progressed, the offer went to $5.5 million, then $6 million, and finally reached $7.5 million, whereupon Stratton agreed and signed his name to the agreement. An interesting sidelight is that Hammond's reported purchase price of $7.5 million exceeded the estimated value that Rickard ultimately placed on the ore in sight.[7]

Evidence entered into the lawsuit and derived from the annual reports of Stratton's Independence, Ltd., contradicts Hammond's version. These documents show that the negotiations leading up to the final sale involved a series of complex agreements between the various parties with some later modifications.[8]

On 2 February 1899, Stratton and Reed signed a formal agreement in the presence of T. A. Rickard. It was this agreement that initiated Rickard's examination of the mine. The agreement described Reed as an associate of the Venture Corporation, and bound him with the Venture Corporation to undertake the financing and promotion of Stratton's Independence Mine. Upon signing the agreement, Reed initiated an expert evaluation of the property by Thomas A. Rickard. The agreement specifically states that Rickard would represent the financial agent, meaning Reed and the Venture Corporation.[9]

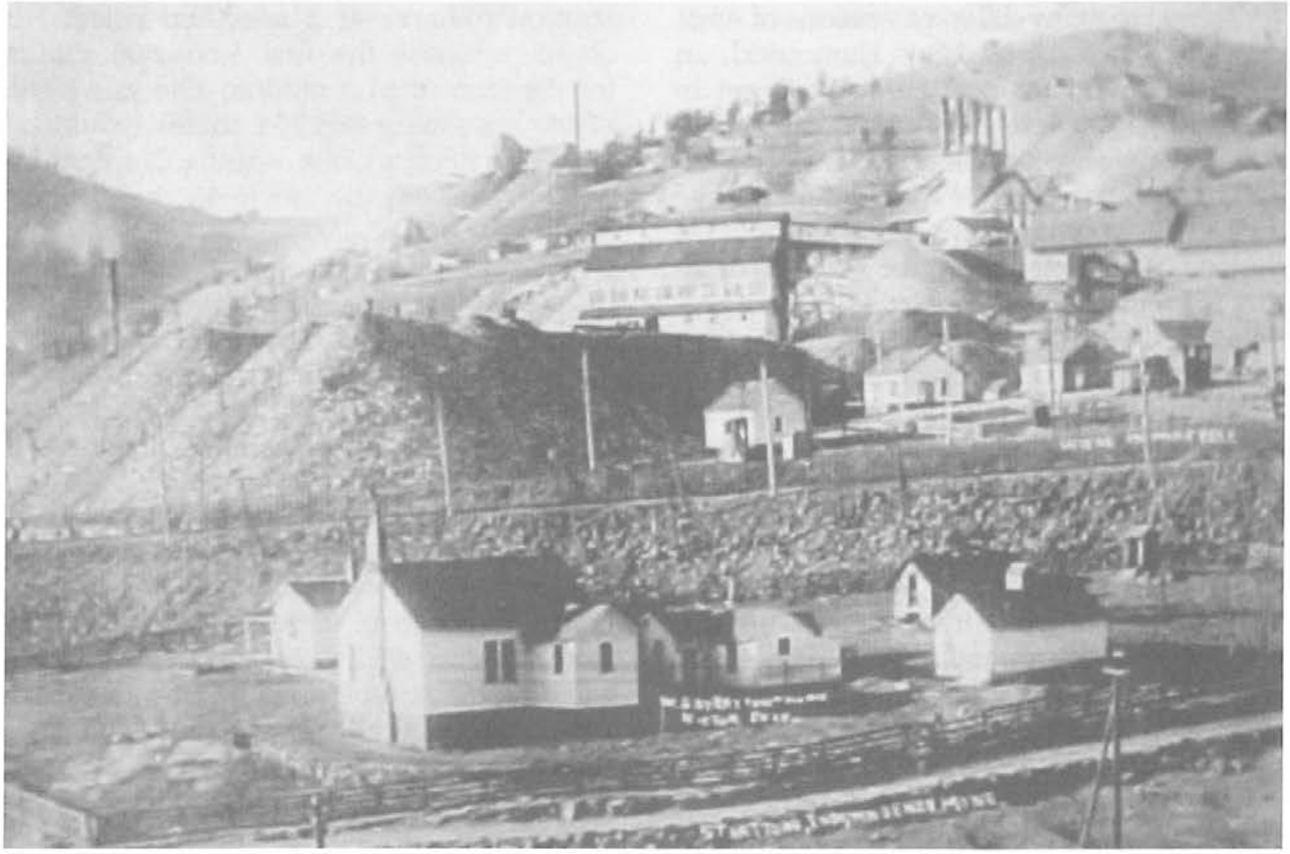
If the report were favorable, Venture Corporation and Reed would form a new company. That company would be capitalized at 3 million shares, valued at one pound sterling each, and Stratton would receive 2.5 million shares in payment for the mine. The remaining half million shares would be set aside to raise working capital as required. Reed would be given the option to purchase Stratton's shares at a specified price. He could purchase the first 1,666,666 shares for the sum of £1.2 million. The sale price of the remaining 833,334 shares would be £800,000. Reed and the Venture Corporation would then sell the stock on the London market.

One section of the agreement, referred to later as the sixty-percent clause, would later form part of the basis for negotiating a new agreement. The terms of this clause required Reed to pay Stratton sixty percent of all proceeds from the sale of the stock over and above the par value.

The agreement contained many questionable clauses. It defined a unique system of directors. There would be two boards: one composed of from three to seven members from London, and a second containing the same number, but made up of Colorado men. Stratton would be appointed manager director and would be a member of both boards. The London board would give Stratton and the Colorado board full power of attorney, and the Colorado board would basically control and manage the mine.

A very important clause, one that would be the main source of the future problem, specified that mining operations "shall be carried on by the local board for the purpose of paying dividends at a rate of thirty thousand pounds sterling monthly or ninety thousand pounds sterling quarterly." This clause set the policy for the rapid mining of the established ore reserves that later took place.

A few days later, on 9 February 1899, an agreement between Reed and the Venture Corporation modified some of these terms. Under the new agreement, Venture would organize the new company and purchase Stratton's stock. Reed would be compensated for his work by receiving commissions from the sale of stock by the Venture Corporation. A later agreement between Reed and the Venture Corporation, dated 3 May 1899, added some provisions for Reed's expenses. The principal spokesman for Venture Corporation at the time was F. W. Baker, T.



The Indpendence Mine. (Courtesy of Ed Hunter.)

A. Rickard's brother-in-law.[10]

With the negotiations successfully completed, Rickard was authorized to begin his examination. Rickard's report, dated 18 March 1899, contains an excellent summary of the mine and the methods that he used to establish what he considered to be its exact value. It is apparent, from a comparison of Rickard's methods with modern ore reserve practices, that he used a very conservative and sound engineering approach.[11]

Rickard took three weeks to do what appears to be a detailed sampling of a mine opened up into over thirty-four thousand feet of workings. Where the workings exposed the ore, he took samples on ten-foot intervals across the full width of the vein. The wall rock adjacent to the vein was not sampled. As events would show, some lower grade gold values did occur in the walls of the vein. The samples averaged about thirty pounds each. They were crushed to a uniform size and quartered. The final pulp was split into two equal portions and each sent to a separate assayer. The two assays were then averaged. Rickard had recognized the serious "nugget" effect of the spotty, high-grade gold values, and he attempted to compensate for it by requiring assays on two separate samples. Rickard had a total of 1,008 samples analyzed.

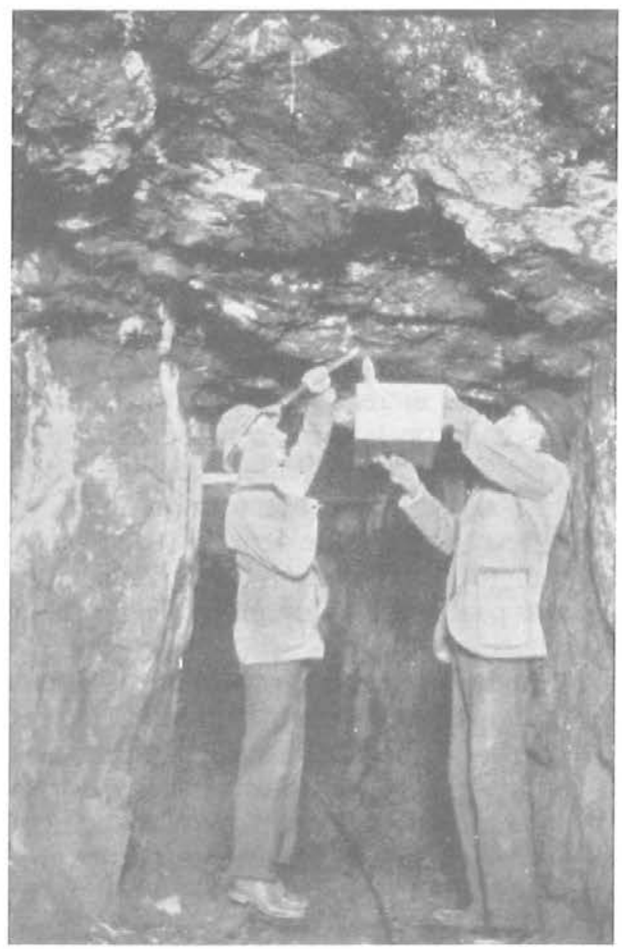
He calculated the specific gravity of the ore at a little over thirteen cubic feet per ton, and to allow for any cavities in the vein he used fourteen cubic feet per ton for his tonnage calculations, thus lowering the total tonnage of ore. Even though many of the workings were only six to eight feet high, he assumed that ten feet had been removed. Where a vertical shaft or main raise penetrated the ore, he diminished the length or height by twenty feet to allow for a supporting pillar. Rather than using the length along the dip of the vein, Rickard calculated tonnages using the smaller vertical height between levels. In summary, Rickard's methods provided a most conservative estimate of the mine's value.

Rickard calculated a total of 53, 246 tons of ore in sight, with an average gold grade of 6.26 ounces per ton. To allow for dilution—the amount of waste or barren rock that would be mixed with the ore during mining—the actual tonnage was increased to seventy thousand, about a 30 percent increase. He considered this rock to be barren and decreased the gold grade accordingly to 4.75 ounces per ton with a gross value of $6,712,000. In addition he calculated that there was over ten thousand tons of sub-ore containing one ounce of gold per ton. Rickard emphasized that to be profitable, this sub-ore would have to mined with the higher grade ore. He projected no ore below the eight hundred level, even though ore was present on that level. He did note that high gold values on the seven hundred and eight hundred levels were an encouraging fact.

Based on the discovery rate in the district, Rickard estimated that fully $8 million gross would be extracted from the mine. He estimated that the mine could produce at a rate of $2 million of gold per annum for at least three years without being depleted. His report concluded: "It therefore represents a splendid field for a thoroughly sound and extremely profitable enterprise." Actual production numbers later confirmed his estimate. When mined, the ore described by Rickard as "in sight" returned a gross value of over $7 million.

Negotiations continued throughout February, March, and April until Stratton finally agreed to the basic price. An agreement signed on 27 April 1899 between Stratton and George Butcher, representing the Venture Corporation, established the basic terms for the sale of the Independence Mine. It provided for the formation of a new company, Stratton's Independence, Ltd., which would be capitalized for 1.1 million shares at one pound each. Stratton would receive one million shares, leaving one hundred thousand as treasury shares for operating expenses. These latter shares were never used, except for seven shares that might have been sold to the new directors to conform to British law. There is no provision in this agreement mentioning Reed or the Venture Corporation. It was further modified on 4 May 1899 to provide for recovering certain unspecified expenditures.

Stratton and the Venture Corporation signed a second agreement on 27 April. In it Stratton was given an eighteen-month option to sell his stock at the following prices: the first 666,666 shares would be sold for £1.16 per share and the remaining 333,334 shares for £2.8 net to Stratton. The Venture Corporation would handle the sales, and



Sampling in the Indepence Mine. (Courtesy of Ed Hunter.)

would retain for its commissions any money above these amounts. However, if any stock sold above £2.10, three-fifths of the excess amount would be credited to Stratton's account. This clause is probably a modified version of the original sixty-percent clause. In another agreement, the Anglo-American Debenture Corporation, Ltd., was selected as the transfer agent.

Once these agreements were signed, operations at the Independence Mine changed drastically. The gutting of the mine started immediately after the incorporation of Stratton's Independence Mine, Ltd. All development was terminated and mining began to rapidly deplete the ore body. During the three months ending 31 July 1899, 8,849 tons of ore were mined, having a gross value of $708,106. The grade of this ore was a little less than four ounces per ton. The lower grade suggests that some of the sub-ore had been mined. Meanwhile, several news releases touted the rich ore being mined and the tremendous profits to be realized. It is obvious that management was following the requirement from the first agreement to operate primarily for dividends, regardless of the condition of the mine.

Who made this decision? Stratton, Reed, and the Venture people would all benefit from a rapid increase in stock prices. Even though Stratton had been made managing director of Stratton's Independence Mine, Ltd., he stayed in Europe for some time to try to recover from the serious health problems that led to his death a few years later. He was probably not capable of much direct supervision.

T. A. Rickard became consulting engineer, but had no management authority. He was not allowed to personally sample or measure the stopes, but could only visually inspect the workings. The local mine management had been reappointed to their respective positions, even though Rickard had objected to some of those appointments. He was forced to rely on those people to supply him with assays and stope widths. It appears that Rickard received little support from Baker, Butcher, and the Venture management. He had become nothing more than a figurehead, and was probably retained for the prestige that his name brought to the company, and was important only to boost the sales of stock.

It is hard to believe that the London office was not aware of problems developing at the mine site. It appears that a mutual agreement existed between Stratton and the Venture people, including Reed, to rapidly mine out the ore body, thereby guaranteeing a steady flow of dividends until the stock had been sold. During the remainder of 1899 and the first half of 1900, production records suggest that the company depleted the high-grade portion of Rickard's reserves. It was estimated that the total production to 1 June 1900 was fifty-eight thousand tons with a gross value of $7 million. Four quarterly dividends were issued, worth $488,000 each, the last being paid on 14 June 1900.[12]

On 16 December 1899, Baker sent a cablegram to Stratton that discussed several issues. The Venture people evidently wanted to have Stratton waive the sixty-percent clause, and Stratton appeared to be dissatisfied with the progress of sales of his stock. Baker wired that by 31 January 1900, total sales would be 438,585 shares. He assured Stratton that the mine was now firmly established on the market, and he asked for Stratton's confidence that the stock would have a successful issue.[13]

But by early 1900 there was concern among the principles about the mine. On 4 January 1900 Rickard wrote to Stratton, outlining a cable he had sent to Baker. In the letter, Rickard reaffirmed Stratton's commitment to maintain dividends during the third and fourth quarters, and to set aside one half of the fourth quarter's dividends for construction of a mill. The fact that a mill was being discussed indicates that the parties knew about the depletion of the high-grade ore. The mill would be necessary to process the remaining sub-ore. Rickard also mentioned Stratton's interest in a quick buyout for $10 million. This suggests that Stratton himself was concerned about depletion of the high-grade ore, leaving only the sub-ore valued at one ounce per ton. Negotiations for a buyout of Stratton continued through February and March, and were completed in April 1900.[14]

Stratton and the Venture Corporation entered into a final agreement on 18 April 1900. Venture Corporation agreed to purchase the remaining stock held by Stratton at a price that, combined with the payments already received, would pay Stratton a total of $10 million, including dividends. It is interesting that in this agreement the monetary values appeared in U.S. dollars for the first time. The last clause of the agreement contained the resignation of Winfield Scott Stratton as managing director of Stratton's Independence, Ltd.[15]

The mine's superintendent resigned with Stratton, and a new superintendent was appointed. For a very short time, Rickard had the freedom to put into practice the policies that he had recommended. He also must have become suspicious of conditions in the mine because one of his first acts was to request that the new superintendent start a detailed sampling and measurement program of the existing stopes. Unfortunately, before the sampling was completed, additional changes were made in London.

In August 1900, an influential shareholder asked John Hays Hammond to examine the Independence. The shareholder was the firm of Werner, Beit and Associates, a South African mining house. It was providing the bulk of the capital required by Venture Corp., and might have actually controlled it. The South Africans were acquainted with Hammond through his work with Rhodes. This move also suggests that insiders in London were starting to question the operation of the Independence Mine. Hammond was unable to undertake the work at the time, but he was appointed advisory or consulting engineer and Rickard was made general manager.[16]

In October, Rickard sailed for London to attend Venture Corporation's annual meeting. His program of sampling and measurement continued in his absence, but unknown to Rickard at the time of his departure, it began to show a serious discrepancy. The previous numbers supplied to Rickard, and upon which he based his estimates of remaining ore, had been overstated. While Rickard was away, Hammond visited the mine for the first time. The local management informed Hammond of their preliminary findings and he immediately relayed the information to Baker and the London office. When the bad news leaked out, the stock of Stratton's Independence, Ltd., crashed.

At first, the investing public and several publications criticized Rickard's original evaluation as being totally inflated. Among these critics was Hammond, who later wrote in his autobiography that Rickard was incompetent in making mine evaluations, and blamed the problem on Rickard's original evaluation.[17] But all of the information available, including production records and evidence entered into the trial, indicates that Rickard's original evaluation was amazingly accurate.

The problem was not Rickard's original evaluation, but the new estimations of remaining ore he made in his periodic reports to London. At the stockholders' meeting, held shortly after the crash, Rickard took full blame for these new estimates. He explained that the local management, under Stratton, had not been experienced in sending out the type of formal reports required by London. Since he was not able to measure and sample the stopes himself, and the local management appeared unable to write the necessary reports, Rickard took verbal reports and included them, under his name, in his formal reports to London. The widths of the stopes could be visually verified during his visits underground, but without systematic sampling the grade could not be determined.

During his examination of the mine in March 1899, Rickard had sampled the width opened up by the development workings, but not the adjacent wall rock. After the sale, the mine staff had constantly represented to him that the ore extended out into the walls two to three times wider than in the original workings. Rickard's latest sampling program found that the stopes had been opened far beyond the limits of pay ore.[18] These wider openings were probably made in the lower grade sub-ore. Rickard's only mistake had been using the local management's verbal reports as his own in his written reports to London. Interestingly, Rickard pointed out that the returns from the smelter closely corresponded with the record of ore shipped. Rickard disappeared from active management of the mine shortly after the stock crash. He was deeply affected by the accusations of incompetence and soon abandoned consulting engineering for a productive career as a mining journalist.

Hammond quickly filled the void left by Rickard's departure with an engineer named Alfred Chester Beatty. The young Beatty had arrived in Denver jobless and looking for his first major employment in mining. His job search was fruitless until he reached Rickard's office. Rickard gave Beatty some office work, and within a short time provided him with a letter of introduction to the superintendent of a mine northwest of Denver. Little did Rickard know that within a few years, Hammond would replace him with the young engineer, and that Beatty would become Rickard's brother-in-law.

On 1 December 1900, the directors of Stratton's Independence, Ltd., released Hammond's statement on his examination of the situation at the mine. Hammond reported that development had been neglected and that "a close estimation of the ore reserve is difficult." However, he did state that the available ore would not exceed 120,000 tons at a gross value of \$2.3 million, or slightly less than one ounce per ton.[19]

Hammond ignored Rickard's strong conclusion that the lower grade sub-ore was not profitable by itself and had to be mined with the higher grade. Production records during the fourth quarter of 1901 show the decrease in ore grade. A total of 11,902 tons of ore were sold at a grade of slightly over two ounces per ton. Within a short time, over a quarter million tons of low-grade sub-ore had been placed on the dump for future processing.[20]

Stockholders who had invested in the company after the spectacular rise in its stock price started to express total dissatisfaction with both the company's management and with John Hays Hammond. In February 1901, a group of stockholders met and decided to raise funds to cover the expense of filing suit to recover part of the purchase price.

As the date of their court hearing approached, Colorado's news media carried numerous articles about the upcoming trial. Public opinion started to side with Rickard, predicting that he would be exonerated over the questions raised about his inability to conduct mine examinations. The *Cripple Creek Times* reported a surprising development in its issue of 17 December 1903. Harry H. Lee, general counsel for the mine, issued a statement that the mine would shut down until further notice. The same article also mentioned that the development program authorized by Hammond and Beatty was nearing completion. The only work to be done during the shutdown would be to keep the pumping system in operation. Lee pointed out that this would permit the engineers representing the defendant to have complete access to examine the mine. He wanted to give "the other side every opportunity to make its investigation."[21]

On 6 January 1904, the Independence dispute was argued in the Circuit Court of Colorado under the title "Stratton's Independence, Limited vs. Dines et al." Tyson I. Dines, of the law firm Dines and Whitted, along with the other trustees and Stratton's sole heir, I. Harry Stratton, were named defendants. The stockholders' case revolved around the accusation that W. S. Stratton had represented to the promoters and organizers of the London company that the property had ore exposed and in sight amounting to \$7 million, and that the mine was reasonably worth \$10 million. The plaintiff argued that Stratton knew this to be false, and knew that the ore in sight valued no more than \$2 million, and that the property was worth not more than $4 million. The plaintiff further contended that Stratton's false numbers had been produced by his agents and representatives, and were based in part on salted samples. Therefore, the plaintiff had been damaged to the sum of $6 million.[22]

The defendants argued that the plaintiff had made its own examination of the property. Baker, not Stratton, had retained Rickard. In addition, all of the mine's records were available for the company's review. The defense also made the point that the plaintiff had extracted and sold ore worth more than $10 million.

The court agreed with the defendants, ruling in favor of Stratton's estate. The most interesting part of the decision was how the court viewed the mechanism for the sale of the company. The court found that Stratton had not received $10 million for his mine, but, in effect, had merely transferred title to the mine to a newly organized company, all of the stock for which was issued to Stratton or his nominees. The effect of this maneuver was merely to change the method by which Stratton held title to the mine. The court therefore concluded that Stratton had taken his chances along with the other stockholders and could not have defrauded himself.

The second major part of the court's decision rejected the shareholders' right to recover damages through the company. The court conceded that some stockholders based their purchase on false information, but ruled that they could not recover their losses by controlling the company. The case was appealed, but on 20 February 1905 the Appeals Court affirmed the Circuit Court's decision in favor of Stratton's estate.[23]

The Independence Mine continued to operate for several years with continually declining ore grades and tonnages. Under Hammond's control the grade seldom exceeded one ounce per ton. Table 1 summarizes various estimates and the mine's actual total production.

Why didn't the Independence Mine produce the high rate of return that the British investors had expected? Much of the answer can be found in the annual cost breakdowns for the period after management was turned over to those investors and during Hammond's involvement. Table 2 shows a cost breakdown for a typical year, 1904. During that year, the mine shipped a total of 43,758 tons of ore. The gross value of this ore was slightly over one ounce per ton or $21.70. The mine's total cost per ton was $24.29, leaving a loss of $2.60 per ton.

The direct operational cost was high but reasonable, considering the type of deposit. The development costs were somewhat high, but probably reflect the lack of development work during the first phase of mining after the sale to the British. Hammond pointed this out in his first reports on the mine. The real problem appears to have been overhead and general management costs, as well as inefficient management. A total of $1.70 of every ton mined went to pay for the London office, a local manager, Hammond, and the foremen. This amounts to seven percent of the total cost. An additional $6,000 went for the position of watchman. The Cripple Creek District was involved in labor disputes during part of 1904, making additional surveillance necessary, but the cost was still high. Hammond and the local management were unable to keep their operating costs in line with the value of the lower grade ore described by Rickard. Basically, management allowed the mining of what was effectively waste rock.

The Independence Mine controversy illustrates why so many western American mining companies formed by overseas investors were unsuccessful. The buyer apparently wanted to obtain profits from the sale of the mine's stock and had no long-range plans for the mine. The home office, in this case London, absorbed too much of the profit, and a costly and inefficient local management failed to operate the mine in a professional manner. Many stock companies like Stratton's Independence felt the need to hire expensive outside consultants like Hammond to enhance their stock values.

Table 1. Independence Mine Production Summary:

Year	Tons	Au ozs/ton	Value Gross $	Comments
From inception to 11 Dec. 1898	41,964	4.60	3,837,360	Includes 4,389 tons of mill ore at approximately 1.0 oz. per ton.
Rickard's estimate, 18 Mar. 1899	53,646	6.26	6,712,000	Undiluted. In addition there were 10,000 tons of sub-ore of about 1.0 oz. per ton.
Rickard's estimate, 18 Mar. 1899 (diluted)	70,000	4.75	6,712,000	Rickard placed no gold value on diluted rock.
Hammond's estimate of ore remaining, 28 Nov. 1900	120,000	0.90	2,300,000	
Hammond's production numbers for the year ending 30 Sep. 1901	66,199		2,506,862	Total production for the year was 148,067 tons, of which 66,199 tons were shipped to smelter.
Stratton's Independence, Ltd., 2nd Annual Report, dated 20 Dec. 1901, covers 2.5 years			7,147,300	An additional 250,000 tons of sub-ore stockpiled on dump with a grade of 4 dwts (20 dwts=1 oz.) per ton (50,000 ozs.).
Total production from 1898-1904			11,046,947	
Total yield, life of the mine			21,061,585	$7,393,654 distributed in dividends. Over $3,000,000 profit to lessees and promoters. Including stolen ore would significantly increase these figures.

Table 2. Mining Costs for 1904 (43,758 tons produced):

Unit	Total costs	Cost per ton
Mining	$226,666	$5.18
Development	$180,721	$4.13
Hoisting, sorting, tramming	$87,516	$2.00
Superintendent (underground)	$11,500	$0.26
Foremen	$11,596	$0.27
Surface watchman	$6,000	$0.14
Manager and consultant	$40,000	$0.91
London office	$17,000	$0.39
Other: smelter losses, freight, etc.	$471,711	$10.78
Settlement for hoisting accident	$10,000	$0.23
Total	$1,062,710	$24.29
Gross value per ton		$21.70
Loss per ton		$2.59

Based on 1904 Annual Report and an article in the *Engineering and Mining Journal*, 17 Dec. 1904.

Most of these consultants failed to provide guidance in proportion to their fees. Both Hammond and Rickard made professional mistakes. Rickard made an error in judgment by failing to substantiate the raw data used in his later ore reserve estimates. Hammond, in his position as consulting engineer, failed to guide the efficient mining of the Independence.

J. S. Curle, a British mining engineer and an expert on the world's gold mines, summarized much of the problem when he wrote: "The American mine owner understands his business and often makes a fortune out of working a mine. The Britisher, on the contrary, turns his mine over to a company, and relies on making his fortune on share transactions."[24]

Paul Mogensen's professional career started in 1954 as a geologist in the Gas Hills uranium area of Wyoming. His retirement fifty years later as president of a publicly held company allowed him to indulge his interests in mining history. He has examined and been involved in mines throughout North and Central America, Europe, and Africa. *He wishes to acknowledge the help of Curator Terry Girouard at the Western Museum of Mining and Industry in the creation of this article.*

Notes:

[1] Biographical material on Stratton from Frank Waters, *Midas of the Rockies* (Denver: University of Denver Press, 1949).

[2] T. A. Rickard, *Retrospect, an Autobiography* (New York: Whittlesey House, 1937), 3.

[3] A. J. Wilson, *The Pick and the Pen* (London: Mining Journal Books, Ltd., 1979), 135.

[4] Biographical material from John Hays Hammond, *Autobiography of John Hays Hammond* (New York: Farrar & Rinehart, 1935).

[5] Frank Waters, *Midas of the Rockies, 210.*

[6] T. A. Rickard, *Report on the Independence Mine, Cripple Creek, Colorado* (Denver, 1899).

[7] Hammond, *Autobiography*, 491.

[8] An excellent summary is contained on p. 5 in "Prospectus of Stratton's Independence, Ltd.," issued by the investment house A. A. Houseman and Co., London, 4 May 1899, Stratton Files, Western Museum of Mining and Industry, Colorado Springs, Colorado.

[9] Copy of untitled typewritten agreement, 2 Feb. 1899, Stratton Files, WMMI.

[10] A. J. Wilson, *The Life and Times of Sir Alfred Chester Beatty* (London: Cadogan Publications Limited, 1985), 45.

[11] Rickard,, *Report on the Independence Mine.*

[12] Fred Hills, *The Official Manual of the Cripple Creek District* (Colorado Springs, CO, 1900), 445.

[13] W. F. Baker, telegram to W. S. Stratton, 16 Dec. 1899, Stratton Files, WMMI.

[14] T. A. Rickard, handwritten letter on Rickard's letterhead to W. S. Stratton, 4 Jan. 1900, Stratton Files, WMMI.

[15] Title page of agreement between Winfield Scott Statton, Esq., and Venture Corp., 18 Apr. 1900, Stratton Files, WMMI.

[16] "Stratton's Independence, Ltd.," *Engineering and Mining Journal*, 17 Nov. 1900, 596.

[17] Hammond, *Autobiography*, 482.

[18] "Mr. T. A. Rickard on Stratton's Independence," *Engineering and Mining Journal*, 22 Dec. 1900, 725.

[19] "Stratton's Independence Report," *Mining Report* (Denver), 26 Dec. 1901, 515.

[20] *Engineering and Mining Journal*, 9 Mar. 1901, and 11 Jan. 1902, 78.

[21] "Cripple Creek 100 Years Ago: Work Resumed on Vindicator, Will not Resume Operations," *Cripple Creek Times*, 17 Sep. 2003, 6.

[22] "Stratton's Independence, Ltd., v. Dines, et al., No. 4,400, Circuit Court D., Colorado, 126 F. 968 1904, 6 Jan. 1904; #126 Federal Reporter, 1904, 969-97.

[23] "Stratton's Independence, Ltd., v. Dines, et al., No. 2083, Circuit Court of Appeals, Eighth Circuit, 135 F. 449; 20 Feb. 1905; #135 Federal Reporter, 1905, 449-65.

[24] J. E. Curle, *The Gold Mines of the World* (New York: George Routledge & Sons, 1905), 234.