



Design and plans for a historical memorial to be erected in Deadwood , South Dakota  
by Aldo L Trucano

A THESIS Submitted to the Graduate Committee in partial fulfillment of the requirements for the  
degree of Master of Applied Art  
Montana State University  
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Abstract:

This memorial is dedicated to the early pioneer. The three-dimensional figures are Calamity Jane Wild Bill Hickok, and Potato Creek Johnny. Those early-day personalities, especially Calamity Jane and Wild Bill, are known nationally for their escapades. They lived and died in the Black Hills and are buried in Mt. Moriah Cemetery in Deadwood, South Dakota, Potato Creek Johnny was of a little later period, but is remembered by the thousands who were privileged to meet him and listen to his tales of prospecting and gold-panning days.

The relief is a composite of the original builders of the country who migrated into the area in search of gold. It also depicts their means of transportation, their joys and their tribulations. The Indian represents the Sioux Nation through whose territory those early pioneers had to travel in order to reach their destination.

The design and plans for the monument described herein have been executed to harmonize with the sloping terrain upon which it is to be built. Its position will also take into consideration the sunlight, for such a project is dependent upon proper light and shadow effects. The materials which will go into the monument will have an affinity for the surrounding cliffs and pine-clad mountain.

DESIGN AND PLANS FOR A HISTORICAL MEMORIAL

TO BE ERECTED IN DEADWOOD, SOUTH DAKOTA

by

ALDO L. TRUCANO

A THESIS

Submitted to the Graduate Committee

in

partial fulfillment of the requirements

for the degree of

Master of Applied Art

at

Montana State College

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Table of Contents

Chapter	Page
Abstract	3
Introduction	4
I Historical Background	6
Wild Bill Hickok	7
Calamity Jane	9
Potato Creek Johnny	11
II Sculpture	12
III Concrete and Cast Stone	15
Formulas	17
IV The Monument and Its Construction	20
V Dimensions of the Monument	23
Photograph of Model Monument in Plaster of Paris	24
Photographs Showing Sections of Model Monument	25
Photographs of the Molds and Cast Figures	26
Plates	
I Bird's-eye View of Memorial	27
II Inside View of Left Wall	28
III Outside View of Left Wall	29
IV Front and Top View of Back Wall	30
V Back View of Monument	31
VI Front View of Ramp and Top Section	32
VII Front and Top View of Steps	33
VIII Cross Section of Back Wall	34
IX Sketch of Relief and Armature	35
X Sketch Showing Method of Sectioning Mold, Cast from Model	36
XI Wild Bill Hickok	37
XII Potato Creek Johnny	38
XIII Calamity Jane	39
Bibliography	40

of the Graduate Committee 29

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Abstract

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### Introduction

The historic city of Deadwood is today a flourishing community still with the flavor of the Old West. It lies in the same canyon that was once hustling with wagon trains, prospectors, and gamblers.

So it is with this in mind that the Chamber of Commerce has for the past few years been planning a monument or memorial designed to commemorate that past. Since the famous characters, Wild Bill Hickok and Calamity Jane had such an eventful life in Deadwood, and are buried in the Mt. Moriah Cemetery, they were chosen to depict part of that past. Potato Creek Johnny, though of a little later period, was a typical prospector, and thousands of tourists remember his tales of panning gold along Potato Creek in the Nigger Hill district.

Originally a bronze bas relief was designed to be set into a concrete wall. This project was not a satisfactory one because the bronze and concrete combination didn't seem appropriate for the location in which the monument was to be built.

The plans herein are for a concrete and cast stone memorial which will have a definite affinity for the locale in which the structure is to be built.

I wish to thank the faculty and members of the Art Department of Montana State for their help, especially Mr. Conrad who has given much constructive criticism on the memorial during its evolution from sketch form to the finished scale model.

Acknowledgments are also due to the members of the Chamber of Commerce of Deadwood, South Dakota, for their aid and assistance on the project.

## Chapter I

### Historical Background

Before going into the proposed memorial, its location, design, and construction, it seems fitting to give a brief resumé of the history of the country and of the characters to whom the memorial is to be dedicated.

Man in his quest for gold has for countless ages made trips into remote and unexplored regions in search of the elusive yellow metal. So it was with the Black Hills.

History is rather indefinite concerning the first white men who, in their never-ending search for wealth, wandered into the mountains in western South Dakota, then part of the Dakota Territory. It is certain that long before the arrival of the first organized expeditions, fur traders and trappers knew of the existence of the mountains and suspected their wealth. It was their tales augmented by stories filtering through from Indians that indirectly led to the formation of the Custer Expedition.

The first gold was found by the Ezra Kind party about 1833. The members of this party were all killed by Indians but left behind them a record scratched on a stone which was found a few years ago near Spearfish by a man named Thoen. The Thoen Stone, as it is now called, is in the Adams Museum in Deadwood.

The Black Hills' recorded history began in 1874 when General George A. Custer and the Seventh Cavalry made a recon-

naisance trip into the Hills from Fort Abraham Lincoln, North Dakota, to explore and map the country.

It wasn't until late 1875 that the Frank Bryant party made rich strikes in Deadwood Gulch. This caused the rush which built up a wild and boisterous gold camp.

With the influx of prospectors came gamblers, prostitutes and professional men. As the camp grew it became a tougher place in which to live, and it was during this time that Wild Bill Hickok (James Butler Hickok) was born in Homer (now Troy Grove), La Salle County, Illinois, in 1837, and grew to manhood in that vicinity. He left Homer and went to Missouri and then moved on to Kansas where he filed claim on a homestead, later relinquishing his right and moving to Nebraska where he again homesteaded. It was on this homestead that he built a corral that was so constructed that he had the entrance through the house only. It was here that he had his famous fight with Dave McCandles.

Wild Bill entered the Army as a Union Scout under General Curtis. After this he was hired by the town of Abilene, Kansas, at \$1000 a month to clean up the place of its roughnecks. He later went to Fort Hays and while there, married a famous equestrienne, after which he left her in Cheyenne and came to the Black Hills with Charles (Colorado) Utter and others.

Wild Bill's appearance as described by Connelly was: "His eyes were blue but could freeze to a cruel steel grey at the



threat of evil or danger. The man who incurred his displeasure, glimpsing them briefly from under half shut lids, saw them as cold, greenish . . . Wild Bill's hair was golden brown, matching the color of his drooping mustache. This long hair gave him something of a girlish look but this was not contradictory. In reality long hair was a badge of manhood and courage, worn as a challenge to any Indian who thought himself a brave - a challenge to come and take it. It was a temptation and a defiance flaunted carelessly and constantly in the face of vicious and treacherous enemies."

Wild Bill was over six feet tall without shoes, and the boots he wore had heels two inches high. He sometimes wore a broad sash of embroidered scarlet silk. His favorite hat was a dark felt with a broad brim.

During the summer of 1876 the citizens of Deadwood decided they should have some form of government to overrule the rough class, and it was rumored that Wild Bill was to be appointed chief of police. The rougher faction warned him to get out of town but Wild Bill was not to be bullied by anyone. So during the afternoon of August 2, as he was playing poker with a group of friends in saloon Number 10, Jack McCall sneaked in the front door and shot Wild Bill in the back of the head. McCall was tried for murder by a miners' court and acquitted but was later picked up by federal authorities, convicted, and hanged at Yankton, South Dakota.

Wild Bill's grave is in Mt. Moriah Cemetery overlooking the town where he met his end. The original marker at his grave was on an ordinary board and was placed there by his friend, Colorado Charley.

It reads:

"Wild Bill, J. B. Hickok, killed by the assassin, Jack McCall, Deadwood, Black Hills, August 2, 1876. Pard we will meet again in the happy hunting ground to part no more. Goodbye, Colorado Charley, C. H. Utter."

Also during this venturesome time came Calamity Jane. Her real name was Martha Jane Canary. She was born in Princeton, Missouri, May 1, 1852. It is said that her father was a Baptist minister and that Jane was well cared for in her childhood days. At the age of sixteen she ran away from school and married an army officer. Soon afterwards Jane "skipped out" to Fort Steele and became a friend of the soldiers and teamsters. She became quite an expert in handling teams and when an expedition was sent north, she donned men's attire and with the aid of her fellow packers, obtained a position with the government pack train. In this work she prospered for several months. When the expedition reached Hat Creek station the train master discovered her sex and as the result discharged her.

Calamity Jane's first introduction to the Black Hills was in 1875. She came in as a soldier in the military expedition under General Crook, who in August, 1875, ordered the miners to

leave the Hills until treaties could be made with the Indians.

Her next trip into the Hills was in 1876 with a party in which Wild Bill Hickok and Charles Utter were members.

In 1878 a terrible epidemic of small pox broke out among the miners and people of Deadwood. Most of the people were afraid to go near the stricken. Women were few to nurse the sick. In the hour of terror and death there came to the front a willing volunteer, the mule-skinning, bull-whacking and rough roving woman, Calamity Jane. Day and night she went among the sick and dying and for weeks nursed them and tended to their wants.

Percy Russell remembers Calamity Jane as "a medium-sized woman with dark brown hair and eyes. In her youth she was of splendid form, clear complexion and uncommonly good looking. In her older age the rough life of the plains and trails coarsened her appearance. She was a strong mixture of the wild, untamed character of the plains and mountain trails and generous, kindly-hearted womanhood. But under the rough exterior there beat a heart so big and friendly as to be without measure. Brave, energetic, kind, always on the line of action, with a helping hand ever turned to the poor and unfortunate, the personality of Calamity Jane became indelibly stamped upon the minds of the pioneers."

Before her death, Calamity Jane requested to be buried by the side of Wild Bill. This request was carried out by the

pioneers of the Black Hills. She died in Terry, a few miles southwest of Deadwood, August 2, 1903.

Johnny Perritt was better known as Potato Creek Johnny and is of a little later period than that of Wild Bill and Calamity. Potato Creek Johnny came to the Black Hills from Wales in 1883, and worked in a barbershop for a short time. He soon gave up barbering and went to work in the mines and mills in the vicinity of Deadwood, but this seemed to him as a rather drab way of living so he decided to do some placer mining. He went into the Nigger Hill district and started panning gold on Potato Creek. It was here that he found the largest nugget ever to be discovered in the Black Hills. The nugget weighed seven and three-fourths ounces, and a replica of it may be seen in the Adams Museum in Deadwood. He washed gold as long as he was able and then spent the last remaining years of his life in Deadwood. While there he delighted the tourists with his tales of the placer mining days, and also during this time made a few trips to Minneapolis and Chicago to show the folks at travel shows how to pan gold.

Potato Creek Johnny was of slight build, being under five feet tall. He wore his hair long, and his round face was covered with a beard and mustache. His eyes were blue and always twinkled when he spoke of his gold panning days.

Potato Creek Johnny died in 1943 and is buried beside Calamity Jane and Wild Bill.

## Chapter II

### Sculpture

Sculpture is the earliest art we know. Primitive man sculptured his hammers and knives from stone and designed them for a definite purpose. The tools were made to fit the hands and designed to cope with the situation for which the tool was made.

Man has progressed since that time, but we still use the same medium, stone, for some of our sculptured pieces. We can learn much from the primitive man about his art in working with stone; they knew the material with which they were working and took advantage of forms natural to the material. So it must be with the sculptor today. He should know the materials with which he is working, though today we have many mediums other than stone in which to express ourselves. Each of these materials has characteristics of its own and what is important is that the effects of one set of tools on one kind of material should not be imitated in another material by another set of tools. The aim of the sculptor should be to represent his conceptions in the forms natural to the material in which he is working.

Sculpture being a three-dimensional art is the art most nearly related to architecture. Sculpture is more solid whereas architecture is hollow. The Greeks and Egyptians tended toward these sculptural aspects in their buildings. Sculpture is never

in any true sense architectural, but the two are often combined. Architecture must have a base from which it is inevitably bound. Sculpture, on the other hand, may be free. It is interesting to note a few variations of sculptured pieces such as the earliest known piece of sculpture, the prehistoric ivory statuette from the Grotte de Lespugue. This piece has no base and is valid from any angle or any point of view. Barlach's war memorial at Güstrow is free to hover in the air, and Brancusi's "Le Commencement du Monde" rests on a point. Some animated forms of sculpture have been perfected by the American sculptor, Alexander Calder. These mobile pieces are either suspended or rest on a pivotal point. Through these examples one can readily see that the sculptor has quite a varied means through which to express himself.

The designer of this monument feels that since this project would be a commission sponsored by the Chamber of Commerce that the memorial will, of course, have to be done to meet their approval. This does not mean that the style or the technique used in the sculpturing will necessarily be stymied, but it does mean that the sculptured statues of the three figures will have to be represented in a manner true to the characteristics of each individual being depicted. These limitations are of course not a hindrance because most any project of this type would have certain qualifications that would have to be complied with.

The material used will influence the manner in which the sculptured figures are to be executed. Cast stone is a hard material, having qualities similar to some of the natural stones that are used for sculpturing; therefore the sculptural aspects of the cast stone will be treated more or less in the same manner as sculpturing in granite or sandstone. The heavy stony quality of the cast stone will be kept throughout the sculptured piece. The statues will be simplified letting the volumes, masses and planes complete the form of the sculptured piece. This definite embedment in the cast stone sculptured pieces will be enduring and practical because there will be no thin sections to weaken any portion of the statue.

The statues are placed at slightly different levels so that one figure will not obstruct the view of the figure behind it. This arrangement of the three-dimensional figures also creates an interesting triangular shape which keeps the spectator's vision within the area of the figures and has relief.

The sculptured figures and the background were always thought of as a unit and any changes in the grouping of the figures also necessitated a change in the superstructure of background. The photographs on pages 25 and 26 show the monument in sections, the figures and sections of the molds.

### Chapter III

#### Concrete and Cast Stone

Concrete may be considered an artificial conglomerate stone made by uniting cement and water into a paste and mixing into this paste a fine material such as sand and a coarser material such as broken stone, gravel, slag, or cinders. Upon the hardening of the paste the entire mass becomes like a solid stone. Mass concrete was employed by the Egyptians and Romans, but the use of steel reinforcements did not begin until the nineteenth century of our era.

Because of its composition concrete has great compressive strength but little ability to withstand tension. Steel bars, rods, or mesh fabric consequently are incorporated into those parts of the concrete members where it is required that tensile stresses be resisted. Concrete may, therefore, be divided into two classes: mass concrete, where the weight or bulk is required and where to a large degree only compressive stresses are present, and reinforced concrete, where it is necessary to introduce steel into the body of the material to counteract the tensile stresses caused by the nature of the existing loads.

The proposed monument will more or less be considered as mass concrete due to the fact that there is no external pressure, but it will be also reinforced to compensate for shifting which may occur. This shifting is doubtful since the formation of rock upon which the monument is to be placed is close to the

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surface making a good bond for the footings of the structure.

**Water-cement ratio:** Too much water in concrete renders the paste (cement and water) thin and watery and reduces the holding strength. Many tests have shown that the strength of workable concrete remains the same for a given water-cement ratio irrespective of the amounts of the aggregates.

A small amount of aggregate will produce a fluid consistency, more aggregates will cause a plastic condition, and still additional aggregate will render the concrete dry and stiff; but the strength will always remain the same.

The characteristic element of cast stone is the aggregate composition. Consequently the aggregate must be exposed upon the face side of the piece. The cement, aggregates and water are mixed as for any concrete and then cast in molds. The molds may be of sand, wood, metal, gelatin, or plaster, as the requirements of the piece indicate.

The best cast stone is of the same composition throughout the piece. Much stone is cast in molds of metal or other materials; only the face is composed of the selected aggregates and the backing is of cheaper material. By this method the quantity of special aggregate is relatively small, and distinctive results may be obtained without great increase in cost. The latter method will be disregarded since the sculptured pieces of the monument will be of the same composition throughout.

After the cast stone has set sufficiently, the forms are























































