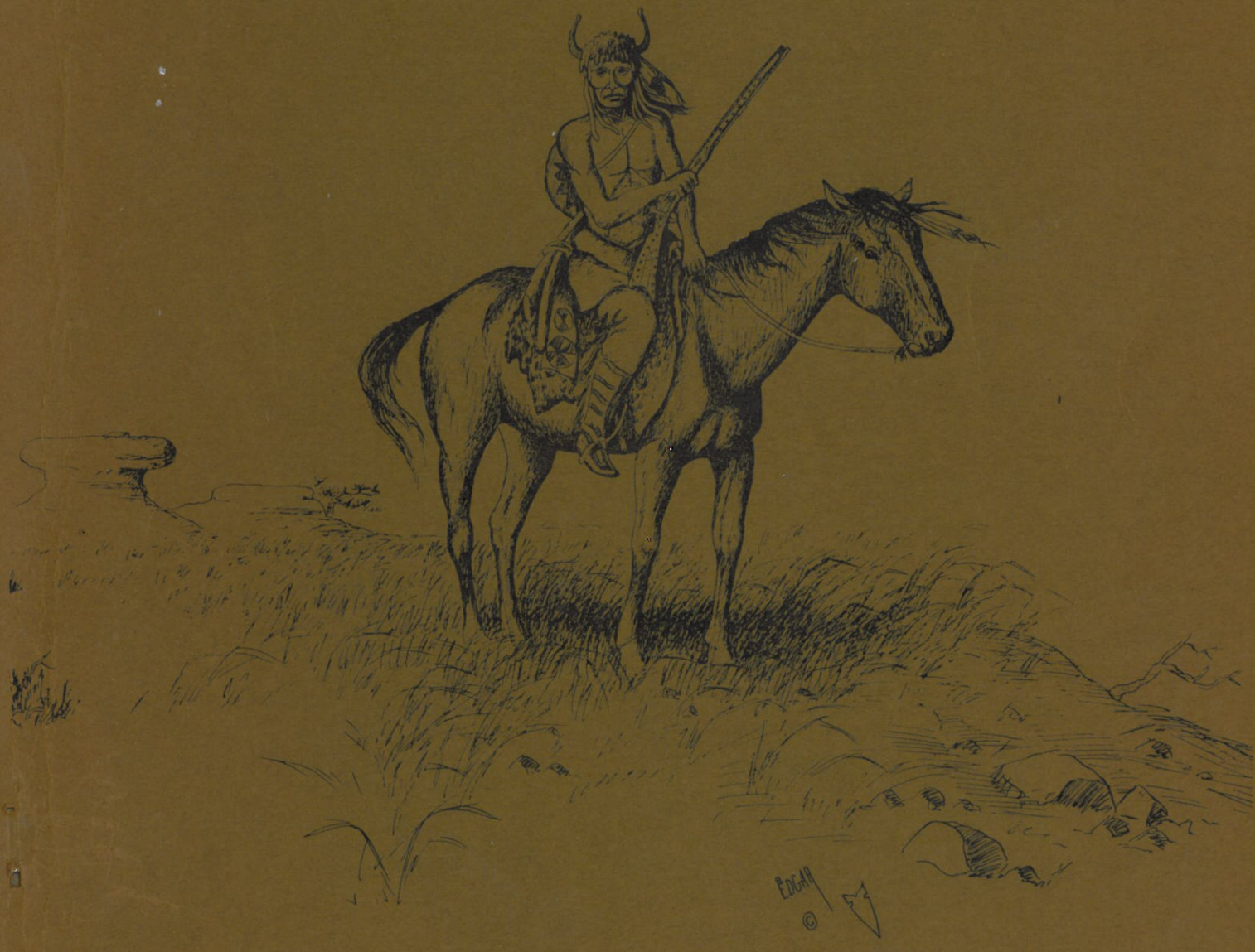
THE WYOMING ARCHAEOLOGIST



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1969 MEMBERSHIP RENEWAL NOTICE
WYOMING ARCHAEOLOGICAL SOCIETY, INC.

_____ Individual Associate Membership @ $3.00 per year

_____ Single Active Membership @ $3.50 per year

_____ Family Active Membership @ $5.00 per year

_____ Institutional Membership @ $5.00 per year

_____ Other Membership, including $10.00 Supporting, Yearly
(Circle One) $20.00 Contributing, Yearly
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APPENDIX II

DECEMBER ISSUE CONTENTS

EDITOR'S NOTES

The very numerous requests for Robert Murray's article on "Glass Trade Beads at Fort Laramie" have long exhausted the back issues of Volume VII, No. 3, of the Wyoming Archaeologist. Therefore, we are reprinting and will have overprints of this very interesting article again available.

Having heard from but three Chapters concerning proposed changes in the Constitution and By-Laws, the volume of the changes indicates that special time for consideration must be added to the agenda of the State Meeting in Casper. Chapter representatives will need to meet on Friday night preceeding the formal meeting on Saturday in order to present the completed proposals for voting consideration.

PROPOSED CHANGES IN THE CONSTITUTION AND BY-LAWS

Cheyenne Chapter

The Cheyenne Chapter vote unanimously to amend the proposed Constitution and By-Laws accordingly:

> "To dispense with the election of the State Treasurer and that that office be appointive by the State Executive Committee to serve at the discretion of the Committee. The Treasurer, so appointed, shall be bonded at the expense of the State Society; and in Article III, By-Laws, in lieu of the elective office of Treasurer, a first and second Vice President be elected by the delegates or their alternates. All conflicting sections to be amended accordingly."

Sheridan Chapter

I. State in Constitution that the appointed State officers are appointed for indefinite terms (in order to provide continuity of Executive Committee).

II. Delete in By-Laws, Article II-S, Executive Secretary appointment "from the present paid-up or past membership", whereas the Constitution requires all State officers be members in good standing of a Society chapter.

III. State in By-Laws that dues be uniform throughout the chapters.

IV. Delete Active State Membership category as there is no difference between this and the Associate category.

V. Prefer to retain Mulloy Scholarship in the Constitution.

Casper Chapter

ARTICLE V - OFFICERS

Delete the last sentence. In its place:

2. There shall be an executive committee consisting of the elected officers of the Society; with the appointed officers of the Society and the State Archaeologist acting in advisory capacity.

ARTICLE VI - CHAPTER ORGANIZATION

A new article VI with the present VI to become VII and the present VII to become VIII, etc.

ARTICLE VI - BOARD OF DIRECTORS

1. The governing body of the Society shall be a Board of Directors consisting of one director from each chapter. Such director to be elected by the Chapter which he represents from the paid-up active members of said Chapter.

2. Other members of the Board shall be the elected officers together with the Executive Secretary, and the immediate past-president of the Society.

3. Acting in advisory capacity shall be the two appointive officers (Editor of the State house-organ THE ARCHAEOLOGIST and the State Librarian) and the State Archaeologist.

ARTICLE VII - AMENDMENTS

The sentence reading "an affirmative vote", etc., to be deleted and to read:

"An affirmative vote of two-thirds of the legal delegates or their alternatives present shall be required for any proposed change in the Constitution or By-Laws of this Society."

ARTICLE IX - MEETINGS

Add to present paragraph:

2. A quorum at any duly authorized legal meeting of the State Society shall be a simple majority of those present.

ARTICLE XI - RULES

Change this to read:

The Wyoming Archaeological Society, Inc., shall be governed by the current edition of Roberts Rules of Order.

ARTICLE I - AUTHORITY OF OFFICERS

1. Delete this and change to read:

The elected State Society Officers with the Executive Secretary, serving as the Executive Committee, shall have charge of all affairs, funds, and property of the State Society, subject to the control of the Board of Directors.

1968 CHAPTER NEWS

CHEYENNE CHAPTER

No meeting was held in January due to inclement weather. In February colored slides were shown of the Chapter's first dig site, "The Happy Hollow Site". The excavation techniques were explained by Lou Steege. All artifacts recovered from the site were placed on temporary display at the Warren Air Force Base library.

James Duguid of Laramie presented the program in March on the Irvine Site, a possible Avonlea Site in Wyoming. All the artifacts recovered from this site were on display at the meeting.

The Cheyenne Chapter delegate, Dr. A. H. Schoondermark, reported on the State meeting in Casper in the April meeting. Mr. A.Lynn Coffin of Fort Collins, Colorado was the guest speaker of the evening. He presented a very interesting program, high-lighted with a fine display of lithic artifacts, from "The Early Days of the Lindenmeier Site".

The months from May through September were spent in excavations at the C. P. Organ Site within the city limits of Cheyenne. This site was a campsite of late Middle Prehistoric Period in origin and is located along the banks of Crow Creek. Completion of Interstate Highway 80 through Cheyenne in 1970 will destroy the entire site. An archaeological salvage agreement was made with the Wyoming Highway Department and permission to excavate the site was given by the District Engineer of the Highway Department. This was the first salvage agreement with the Highway Department and another milestone was gained in the records of the Wyoming Archaeological Society. Excavations at the site will continue in 1969.

A reception was held in October in the home of Dr. and Mrs. A. H. Schoondermark of Fort Collins, Colorado, in honor of Maria Martinez and her son, Po Povi - Da. Maria Martinez is the famed potter of San Ildefonso Pueblo in New Mexico. The members of the Cheyenne Chapter of the Wyoming Archaeological Society and the Loveland Chapter of the Colorado Archaeological Society were invited to attend this reception.

Lou Steege showed color slides of the excavations of the C. P. Organ Site during the November meeting. The proposed Constitution and By-Laws were studied and a recommendation for a change was made by the Cheyenne Chapter. This change is printed elsewhere in this issue.

The December meeting was a dinner meeting held in the "Downtowner" in Cheyenne. Dr. William Mulloy was the guest speaker, who presented an interesting program, illustrated with color slides, on the history of Easter Island. Many facets from Prehistoric times to investigations conducted during the past 6 months were covered.

116 persons attended this meeting including the State Archaeologist, Dr. George Frison and Mrs. Frison. Members of the Cheyenne Mineral and Gem Society were also in attendance at this dinner meeting.

The Cheyenne Chapter experienced an interesting and busy season during 1968.

Bee Steege, Secretary - Treasurer

CHEROKEE TRAIL CHAPTER

The Cherokee Trail Chapter will soon be moving out of its Freshman classification to the Sophomore classification. The year since its formation in Saratoga has passed rapidly but many things have been accomplished and the meetings held regularly on the second Friday of each month have been very well attended. The chapter has had an average attendance of 28 members.

To break the monotony of indoor meetings during the summer months we have had four field trips. The months of June, July, August and September were devoted to field trips. Our first trip was to the Cherokee Trail Monument on the road between Elk Mountain and Arlington. We were fortunate in having State President Jim Adams and his fine wife Lucille come all the way down from Lander to be with us on our first field trip. Jim gave us a very nice talk at the monument site and then we scattered out in the area to see what we could find. Several people were fortunate enough to add to their collections with some good surface finds.

The following three field trips were also very productive for the collectors. All trips were confined to the general area of Carbon County.

In August fourteen of our members traveled to Gillette to attend the State Summer meeting and this reporter wants to say that the Gillette Chapter under the fine leadership of Bill Barlow, did an outstanding job in arranging an interesting program. Thanks Bill.

One of our members, Garrett Allen, an oldtimer at artifact hunting, has discovered a site which may well prove to be extremely interesting. Preliminary exploration indicates the possibility of the site having at least four different occupancies. We are waiting on Dr. Frison to examine the site and approve of its opening.

The Chapter has had one fund raising program and it was very successful.

One of the standard procedures for our meetings has been to have a members name drawn for the purpose of having him put on a display of items collected by him and

give a short talk about the items. This has proven to be a very interesting idea for our indoor meetings. Many rare and instructive items have shown up.

Now that the snows are beginning to prevent outdoor activities it would seem to be the proper time to get the summer finds cataloged and mounted.

The Cherokee Trail Chapter boasts of its membership in that we now have 26 family memberships and 7 individual memberships.

During the coming year we would like to see an overall state membership list showing names and addresses so that in our travels we can make personal contacts.

Merry Christmas and Happy New Year to all.

Cherokee Trail Chapter

Your Chapter News Should Be Here - -

IS

IT ?

The anatomy of the active membership of the Wyoming Archaeological Society is made up of four kinds of bones:

Wish Bones -- Those who want someone else to do the work.

Jaw Bones -- Those who talk a lot but do nothing.

Knuckle Bones -- Those who knock everything others try to accomplish.

Back Bones -- Those who get on the ball and do all the work.

WHICH KIND OF BONE ARE YOU ? ? ? ? ?

HISTORIC ARCHAEOLOGY IN WYOMING

By
William Barnhart, Assistant Historian
Wyoming Recreation Commission

Very little can be said concerning past work in Wyoming relative to historic archaeology. During the years in which the field of archaeology has slowly and painfully gained momentum in the State, the historical area has largely been neglected. For all practical purposes past efforts towards a program of historic archaeology have been non-existent. Now, at long last, prospects look bright that the Wyoming Recreation Commission will soon be able to implement a beginning program in historic archaeology.

Acceptance of the importance of historic archaeology has been and will continue to be a major obstacle in its implementation. Acceptance is vital if support is to be gained in obtaining the necessary and essential funds for a working program. This means acceptance not only by the general public but by those in the professional diciplines as well. The support of those outside the field of archaeology can best be gained through information and education while attitude is the matter of greatest importance for those within the fields of interest. Up to now much of the emphasis in Wyoming archaeology has been centered on the Early Period cultures and this has affected serious consideration of the later and historical aspects of archaeological study. There is little doubt that the Early Man cultures in Wyoming offer an extremely exciting, fascinating and tantalizing field of discovery. Still, in an overall appraisal, the knowledge of Early Man is most significant as a part of an entire evolutionary sequence where historic cultures represent an equal though opposite end of the spectrum.

Historians might also take a closer look at historic archaeology for its research potential in answering many unknowns concerning the past. For instance, Wyoming's Fort William (later called Fort Laramie) and Fort Bridger represent two of the earliest and best known establishments in the West yet the precise locations of their original stockaded structures remain unknown. Their locations will have to be determined by archaeological investigation and through this method a great deal more information can be obtained concerning life on the frontier.

Unfortunately, time is rapidly running out for a meaningful program of historic archaeology. In prehistoric sites, artifacts may remain in the soil unchanged for thousands of years but such is not the case with many historic sites. The metal artifacts, so important to historical interpretation, are now rapidly corroding, oxidizing and otherwise deteriorating so that eventually identification will be impossible. Another immediate problem in Wyoming is the marked increase in "pot hunting", which is fast becoming a traditional pastime. This situation promises to become increasingly worse in an affluent society that offers more and more leisure time for the pursuit of the bottle and artifact collecting that is placing such destructive pressures upon all archaeological sites. Since the

location of many of Wyoming's historical sites, in contrast to the prehistoric sites, have been well documented and publicized the probability of their destruction in the near future is quite high. By indiscriminate digging, many have already been ruined to such extent that they will never be of any value for purposes of archaeology.

The first step then in a program of historic archaeology is protection of as many sites as possible until such time as they can be worked or developed. Presently, the Wyoming Recreation Commission is doing all within its power to provide protection for all historical and archaeological sites. Sites on State lands are, of course, off-limits to excavation without proper credentials. The Commission has recently worked out an agreement with the Bureau of Land Management whereby certain sites and areas on Bureau lands can be protected. Additional protection of important sites by the federal government has also been established through the National Historic Preservation Act.

However, the wide open spaces of Wyoming limit the effectiveness of any protective measures. Immediate site excavations and developments offer the best course of action. An inventory of prospective sites of the historic period is presently being made by the Commission to determine which ones offer the greatest potential. Priorities for investigation, excavation and development will be assigned and a determination will be made concerning the type and degree of information that needs to be gathered from specific sites. In some cases where only marginal information can be gained, the expense of archaeological investigation will likely dictate only salvage measures or a "status quo" situation. As is always the case, the availability of funds will have great bearing upon the extent of any work done.

At the present time State Archaeologist George Frison has given the Recreation Commission a list of twenty prospective sites of the hsitoric period for investigative consideration. Members of the Wyoming Archaeological Society are requested to contribute any information on historic sites they feel would be of value. Since historical records relative to Wyoming before 1850 are scarce, the period of early exploration and the fur trade offers excellent potential for investigation. Fort Bridger in Uinta County, Fort Bonneville in Sublette County, the Portuguese Houses in Johnson County, and the various fur trade "rendezvous" sites are prime examples. Other possibilities include military forts and camps, stage and Pony Express stations, trading posts, various camp sites, old towns and sites of early day conflicts and tragedies. Some of these sites should offer a logical sequence from the known (historical) to the unknown (prehistoric) peoples of the region since it was a practice to situate historic structures in locations long favored by the Indians for camps. A good example of such an occupation sequence is at Willow Springs near Laramie. Archaeological excavations have turned up material suggesting a lengthy Late Period occupation as well as ample material from the time WillowSprings served as a stage station on the Overland Trail during the

1860's. Surface finds in the immediate vicinity indicate the possibility of Willow Springs being used by Early Man as well.

How the 1969 legislative session will deal with the archaeological needs of the State of Wyoming is not known. Commission budget requests for funds to initiate several archaeological investigations have been submitted for approval. Hopefully, the funds will be forthcoming and work can begin next spring on a concentrated effort to begin preserving a now rapidly vanishing aspect of Wyoming's heritage. There is a definite need and place for historic archaeology in Wyoming and -- as one area of archaeology succeeds -- so succeeds all the rest.

ENROLLMENT OF ARCHAEOLOGICAL SITES
upon the
NATIONAL REGISTER OF HISTORIC PLACES

by
NEDWARD M. FROST, HISTORIAN
Wyoming Recreation Commission

Archaeologic and historic sites are eligible for enrollment on the National Register of Historic Places when individual worthiness is substantiated through disciplined research and passes a review before a regularly constituted board of eminent academicians.

There are several important consequences to National Register enrollment but the paramount one is prestige. For the National Register is not only the symbol, it is also the very essence of all that the Congress sought to imply when, in promulgating the National Historic Preservation Act of 1966, it stated:

"That the spirit and direction of the nation are founded upon and reflected in its historic past;

"That the historical and cultural foundations of the nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people."

Here is a preamble that sets forth a noble aspiration and, very properly, the Act which it introduces proceeds to spell out a formula whereby that vision can be converted to reality. This is a formula which not only permits but also provides. Under it Grants-in-Aid become available for the preservation of bona fide historic and archaeologic places. Yet, preservation in itself being but a hollow and sterile accomplishment, the formula stipulates that restoration, interpretation and presentation may be -- under various conditions and circumstances -- necessary additaments.

Having provided such general guidelines and also -- however surprisingly -- for an effective but not overwhelming federal administration, the Congress wisely opened actual use of this legislation to the several states, to their subdivisions, to private societies and even to individuals. Anyone can make use of the National Historic Preservation Act in the accomplishment of an objective leading to the protection or enhancement of the nation's historic and cultural heritage. Particularly in the field of archaeology -- where so vast and so rich a portion of the total heritage remains undiscovered to this time and where often what has been discovered must remain a secret because of fear of vandalism and lack of exploratory and development funds -- the National Historic Preservation Act and its protective and honorific device, the National Register, offer relief and opportunity.

The immediate, automatic protection offered by National Register enrollment is from the effects of rapidly expanding civilization. Any projected public development projects by necessity of the law, and many private ones by voluntary compliance, will not proceed into action until the National Register has been checked against any possibility of conflict with a registered historic landmark. Where conflicts are found to exist, consultations will be held. Evasive measures will be searched out or salvage operations planned; only in rare circumstances, and then by decision of highest authority, will a registered historic landmark be sacrificed to the needs of expanding civilization.

Of course protection from acts of vandalism is another consideration, one recognized by everyone as a most difficult matter, particularly in the waste lands and wildernesses where so many archaeological sites are located. Here it is hoped that the prestige of the National Register itself, may be of some assistance but the greatest value of the new preservation law will here be found in its provisions for Grants-in-Aid. As soon as comprehensive planning has been completed by the state and gradually increasing funding provided by Congress, it should be possible to provide for exploration of several archaeological sites each year and, where importance is great enough, for some public interest development, interpretation and presentation.

Under provisions of the Preservation Act administration of most legal provisions and work phases are under control of the several states, only guided by the National Office and then chiefly for the sake of providing -- if not uniform procedures of action -- at least the necessary close uniformity of results. In other words, qualification for Register Enrollment, or for Grant-in-Aid funds, in California must be comparable to what it is in New York and we in Wyoming can't do too differently from either of those larger states.

The Wyoming Recreation Commission is the administrative agency for the National Historic Preservation Act within the State of Wyoming. Under provisions of the National Act the Commission has set up an office of Archaeology and History, has made a continuing inventory of sites pertaining to both disciplines, and has formed a comprehensive plan for preservation, restoration and interpretation or presentation of those sites. This plan contemplates that the overall work will be aimed at two chief objectives, the cultural benefit of the state's own citizens and attracting the interest of visitors. Of course, the latter envisions an equal cultural benefit to those visitors, but it also carries the implication of economic benefit to the state.

In the above paragraph mention is made of a continuing inventory. Actually, the Commission has some 500 historic and archaeologic sites under a complete cross-filed system which becomes a part of the master historic preservation plan as each single part is fitted into place. But this inventory will never be complete for two reasons: (1) because history, itself, continues to leave new historic sites; (2) because archaeologists will always be finding anew some long forgotten site belonging to some previous human culture.

So whenever a new archaeologic site is discovered it should be brought to the attention of Dr. George Frison, head of the Department of Anthropology, University of Wyoming, who is also the State Archaeologist. The site will be entered upon the state inventory list and so become a part of the Preservation Plan. In due course of time it will be properly investigated and, if it meets qualifications, proposed for National Register Enrollment. Sites particularly significant and conveniently located for visitation will eventually be subjected to proper development and interpretive work. Such work can either be sponsored by local chapters of the Archaeological Society or by the Commission itself and with the assistance of federal Grants-in-Aid. But whatever the sponsoring group, administration of Grants-in-Aid will be through the Recreation Commission as specified by federal and state laws.

In those instances where, under the Comprehensive Plan, more than preservation is deemed advisable the succeeding stages will involve varying degrees of restoration, interpretation and presentation. Nor should one of these phases be attempted without full intention of

following through with the remaining two. For of what avail is restoration -- how can it in itself promote the aspiration envisioned by Congress -- except to attract an audience which must be offered additional cultural or aesthetic rewards as compensation for whatever time and effort is expended in reaching and studying the site? So, hopefully, will mature visitors discover unexpected dividends connected with Wyoming travel while, during the foreseeable future, at least some members of growing generations may find inspiration for study and cause for pride in their birthright.

While this entire historic preservation program is still so new, including the Comprehensive Plan of procedure itself, as to be subject to constant revision yet a seemingly paradoxical situation is already within view. That is that there will always be some units of the plan reaching completion and passing from the development into maintenance category. Now this isn't just about to happen to any historic or archaeologic site within the next few months but there are some sites plainly of such critical importance that their individual development plans are either on or already off the drafting table. Among such archaeologic sites is a Buffalo Jump alongside Interstate 25 near the town of Glenrock. This site has received particular attention for several reasons: first, because it is a particularly spectacular and easily understood situation; second, because it is available to a large year-around audience; third, because it can be so readily interpreted and presented; and, fourth, because it concerns a subject of general interest, generally presented in primary school curriculum throughout the nation. By every criteria for establishing priority -- by local archaeologists' interest, by staff judgment, by professional review -- this is a site for early development.

It so happened that this consideration for early development of Glenrock Buffalo Jump Site was mentioned in a recent edition of the Commission Newsletter. A surprising news media raction, at least surprising to the Recreation Commission, was that the story itself appeared in newsprint but applied to other Buffalo Jump Sites in other sections of the state. The Commission wishes to make it clear that the particular work projected at this time refers to the Glenrock - Interstate 25 Site -- which does not mean that other valuable sites have escaped recognition.

What it does mean is that in a field so new -- with so much to do and such great possibilities -- the state adminstrating agency needs help from every possible source and one of those greatest possible sources is the Wyoming Archaeological Society. The Recreation Commission can render the state a great service through administration of the National Historic Preservation Act, but it must have all the help it can get from the people themselves if the best job possible is to be done.

BLM ACT TO PROTECT WYOMING'S HISTORIC TRAILS

By
Randall Wagner, Information Officer
Wyoming Recreation Commission

Early last spring noted Historian Paul Henderson guided members of the Wyoming Recreation Commission staff on a three-week tour of the Oregon Trail across Wyoming as a preliminary step in the Commission's production of a feature historical motion picture on the subject. During the trip, Henderson pointed out several recent examples of damage and destruction of significant Trail sites. In most cases the damage was clearly a result of mineral prospecting activity on the public lands during the winter of 1967-68.

Evidence of heavy prospecting activity was first noticed west of Casper and continued to be noted across the Sweetwater Desert, through South Pass and as far west as Farson. Damage to trail sites was particularly heavy in the historically important South Pass area where all branches of all the various trails came together to cross the Continental Divide at the south end of the Wind River Mountains and enter Oregon Territory before branching to their separate destinations of California, the Salt Lake Valley and the Columbia River Basin.

Henderson expressed concern that this country that had remained virtually untouched since the pioneers left it some 100 years ago had suddenly been turned into a virtual forest of claim stakes connected by an unending pattern of bulldozed roads. Claim proofholes appeared within the ruts of the old trail. Heavy equipment had, in cutting new roads around snowdrifts, completely obliterated historic features that had once been created by the almost superhuman efforts of generations of westward bound Americans.

At the end of the trip, Commission personnel contacted the state headquarters of the Bureau of Land Management with a report of the damage noticed and asked that the Bureau investigate to see what steps could be taken to protect Wyoming's historic trails in the future. Two events that will be significant to historic preservation in Wyoming resulted from this contact.

First, it became apparent that damage to such sites is mostly inadvertant and results from a lack of general knowledge of those places in the state that possess features of historical or archaeological importance. The Oregon Trail is marked with cement markers that carry bronze "Oregon Trail" medallions, but these are not enough. Steps also need to be taken to inform and educate the public as to the importance of the feature and to protect and preserve it from damage.

In the case of the Trail destruction at South Pass, the major mining and exploration company involved expressed regret that a firm they had employed to stake claims had damaged historic features. The company then went to considerable trouble

and expense to repair, as much as possible, the damage that had been done and asked to be informed of other historic features in their operating area.

Secondly, the Recreation Commission and the BLM drafted and adopted the "Wyoming Historic Trails Agreement" under which the agencies will jointly work toward the preservation, interpretation and presentation of those segments of the Oregon and other trails that the Commission feels should merit protection.

In initial action under the Historic Trails Agreement, the BLM has filed application to withdraw 3,327 acres of public lands in Natrona and Fremont counties from mining locations and all forms of disposal except lease or sale under the Recreation and Public Purposes Act. The BLM lands would remain open to mineral leasing under stipulations to protect the Oregon Trail and other historic features from damage.

Included in the 3,327 acres are prominent landmarks, well-preserved wagon ruts and other sites of historic interest along the Trail from Independence Rock to South Pass. The Devil's Gate, Split Rock, Sweetwater Canyon and the South Pass Summit are all part of the withdrawal request. The Recreation Commission will continue to supply the BLM with an inventory of additional segments of state Historic trails which appear to merit such protection.

"Our agency has no intention to preserve the entire stretch of the Oregon Trail across Wyoming," said Recreation Commission Director Charles R. Rodermel. "We do hope to save those isolated sites that possess outstanding historic importance and to do the interpretive work necessary to present them to the public."

Rodermel said that the Recreation Commission is looking forward to the day when all significant sites along all Wyoming historic trails can be developed with good informative signs, hiking trails, picture points and public day use facilities. He pointed out that such a program would lead into the development of a system of state historic parkways that would allow residents and visitors to follow the trails on modern highways, pulling off occasionally to view the landmarks, walk the ruts and read the informative signs dealing with that particular portion of the trail.

"Complete guidebooks for each trail and centrally located interpretive centers somewhere on the route of each trail are also being planned," Rodermel said.

THE BUFFALO HEAD OF CASTLE GARDENS

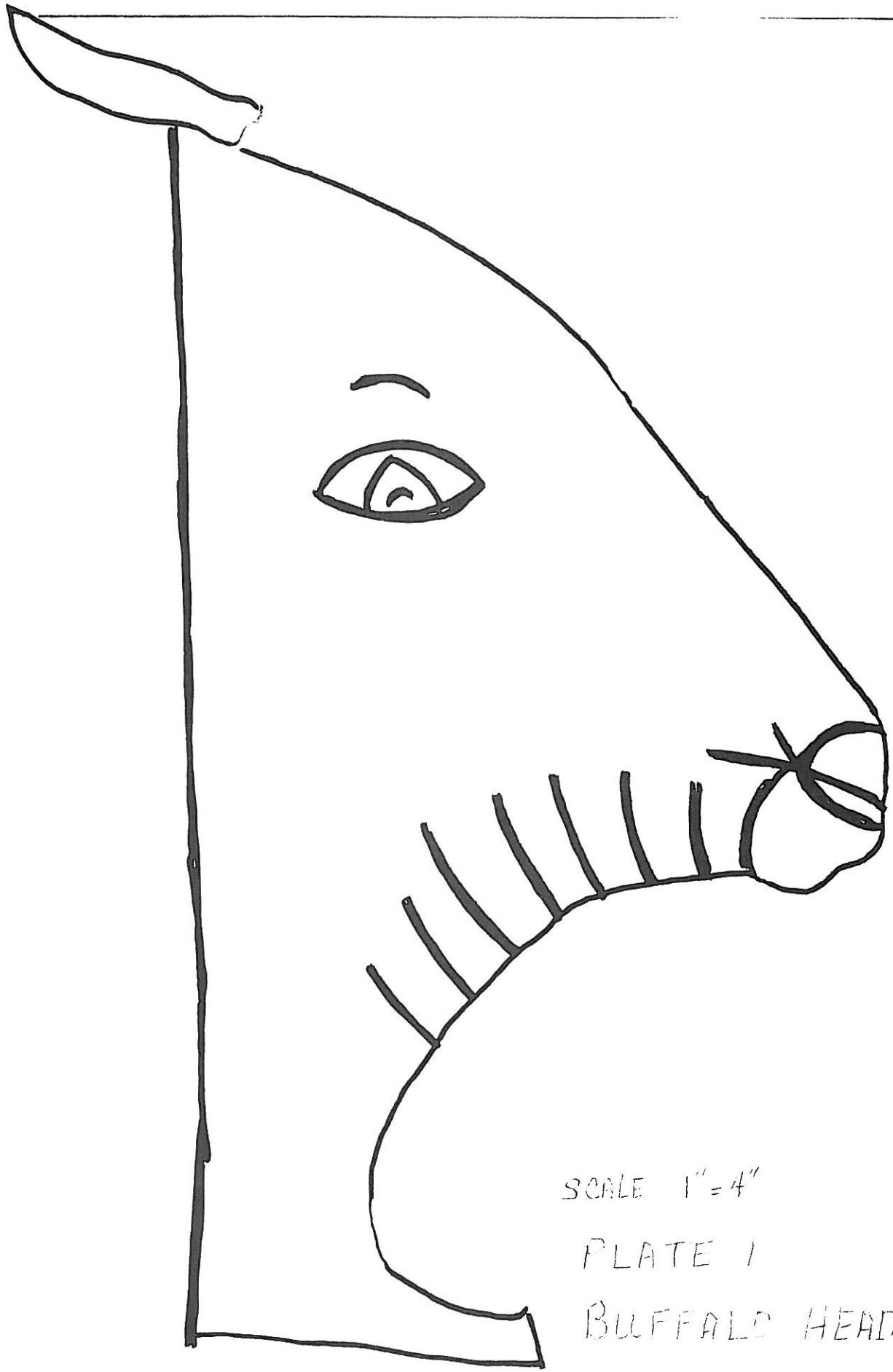
By
Leah Begovich

There is a very unique petroglyph in Castle Gardens which seems to have been missed by those who have published material about this site. It is a relief sculpture of a buffalo head (plate 1). The artist has made use of the natural rock formation for the outline of the head and the horn. He then incised an eye, nostril, mouth, and mane hair.

The head is so done that a buffalo seems to be emerging from the rock. Only his head, horn, and a bit of his neck have been thrust out. This petroglyph is placed where a natural ridge of rock forms a right angle to the larger rock (plate 2). The petroglyph then forms another right angle to the rock below the horn. As a result of these angles, the head appears to emerge from the larger rock on which it is incised.

This petroglyph is on the north side of the first rock containing petroglyphs at the east end of the Gardens (plate 3). This large freestanding, rectangular shaped rock measures 24 feet by 33 feet. The buffalo head is in the center of the narrow north side. The bottom of the head is 5 feet and 4 inches above the ground. The head, itself, measures 34 inches high by 18 inches wide. The petroglyphs on the south side of this rock have been published (plate 4). The small petroglyph to the right and below the head has also been published (plate 5). The head can be seen only when the viewer stands northeast of the large freestanding rock on which it is incised. Due to the way it was placed, looking from the northwest, the viewer sees only the natural rock and the petroglyph of plate 5.

This petroglyph is the only one that I have seen in the Wind River Basin in which the artist made use of a natural rock formation to create a sculptured effect.



SCALE 1" = 4"

PLATE 1

BUFFALO HEAD

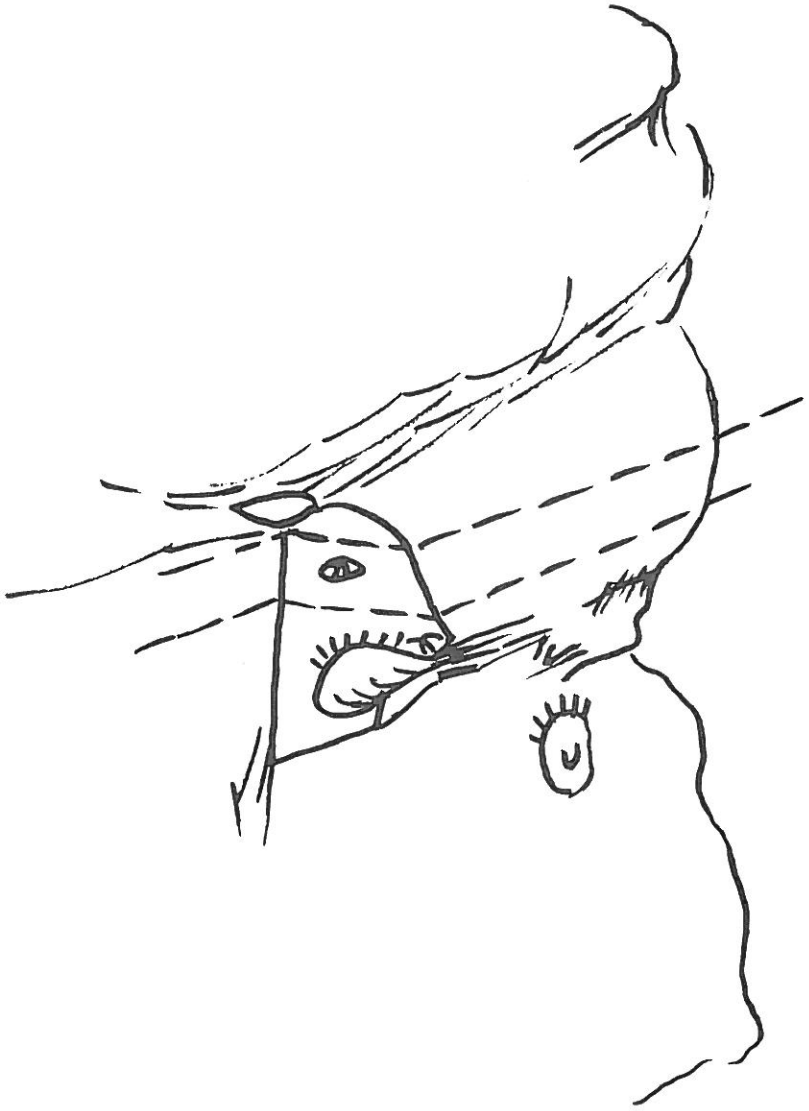


PLATE 2

DOTTED LINES ARE ADDED ONLY TO ILLUSTRATE HOW THE BUFFALO HEAD IS MADE TO APPEAR TO EMERGE FROM THE ROCK BY TWO EIGHT ANGLES

PLATE 3

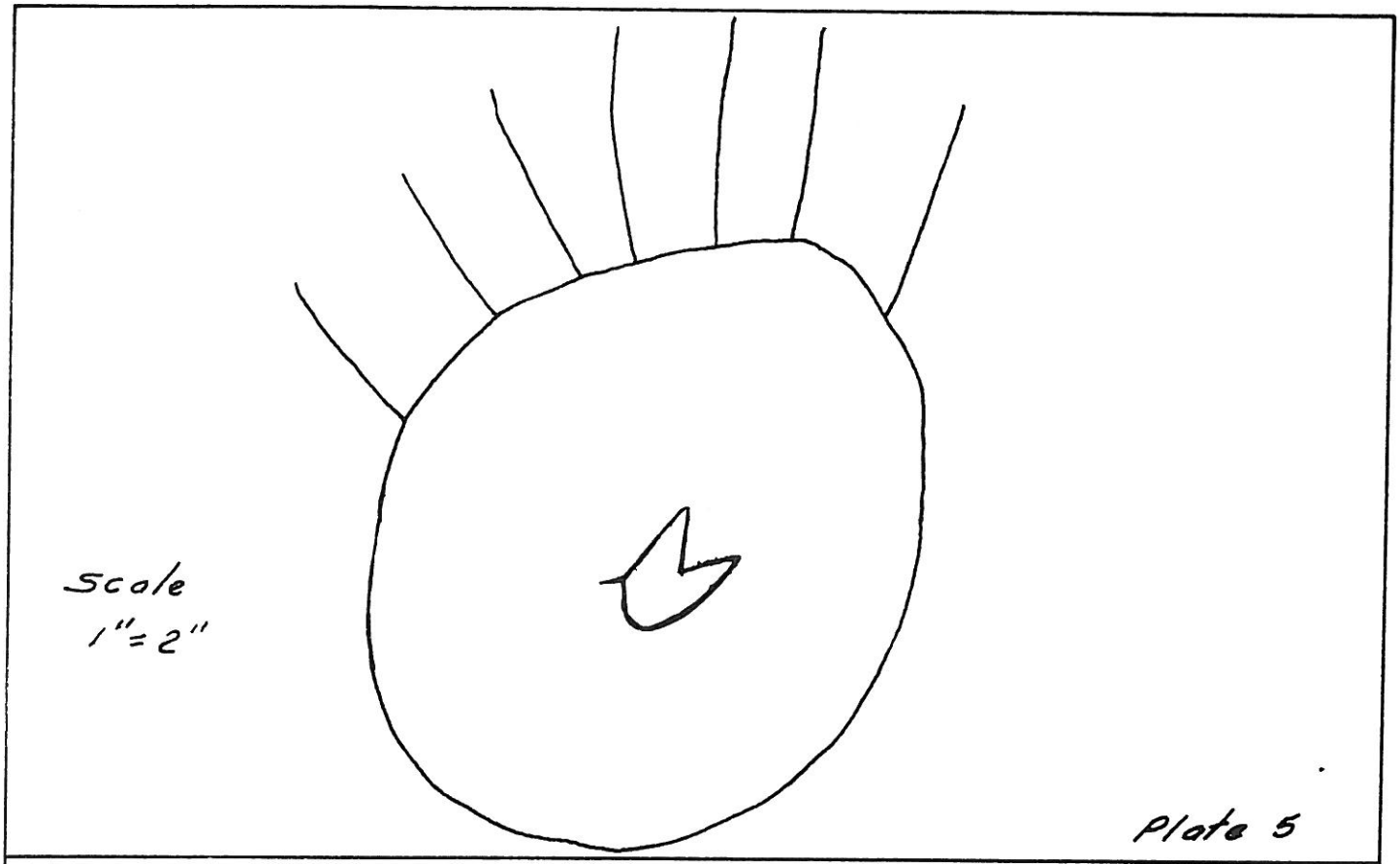


Plate 5

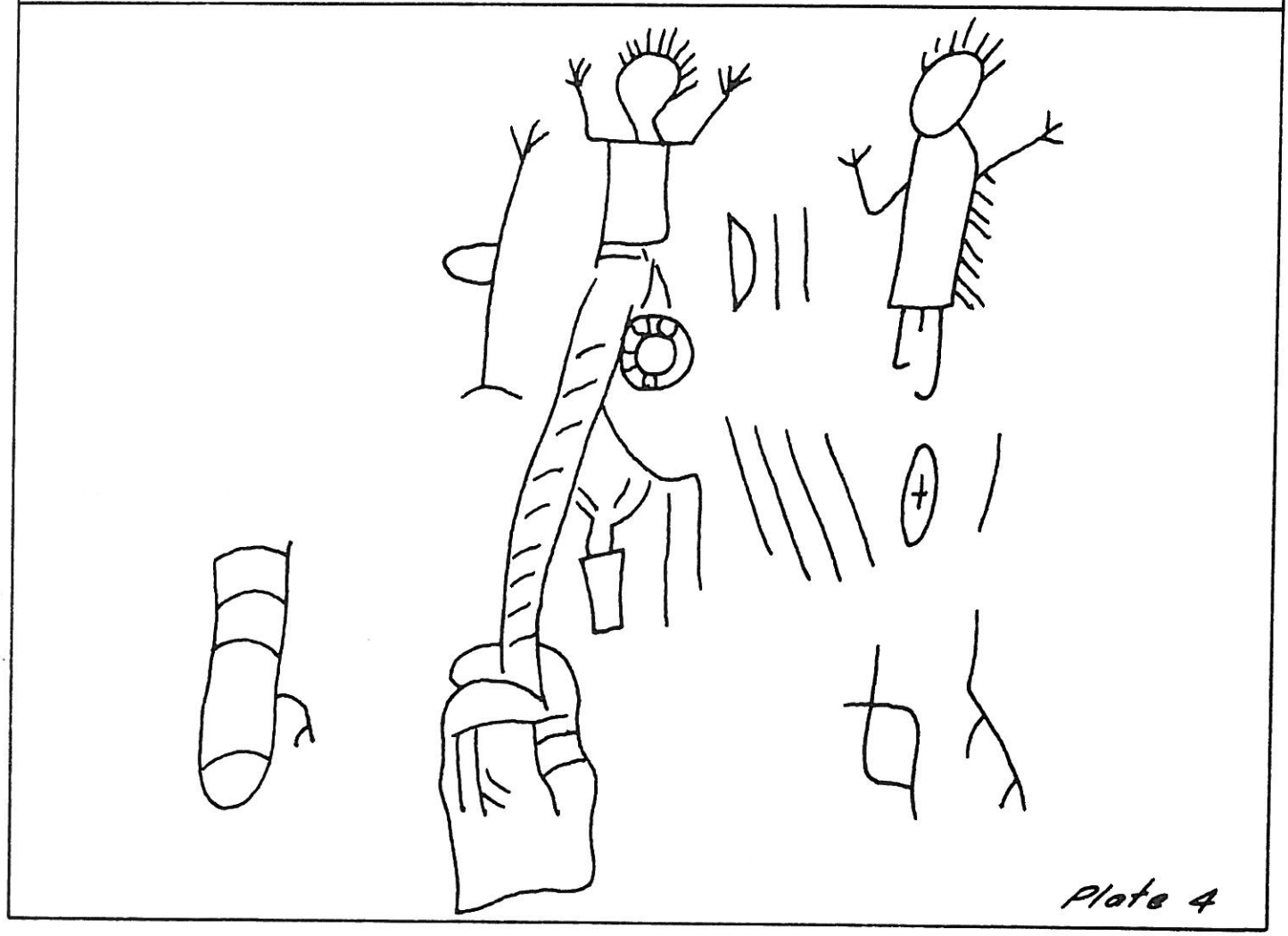


Plate 4

INYAN KARA CREEK CACHE AND WORKSHOP AREA

By

William L. Barlow

The pleasant pastime of surface hunting can occasionally be illuminating as well as exciting. One of the phenomena which surface hunters and collectors understandably hope of locating is a cache. These have been found more often than is generally supposed if instances could be documented.

Here in Campbell County, Mr. Lee Gates, about 1919, found a cache of large quartzite blades in a depression with many flakes piled on top. These bifaces are in his collection today. Mr. Ray Bell more recently came across a number of large quartzite blades on the steep bank of a canyon. Also found were several chunks of the raw material. These two discoveries were on Wildhorse and Fortification creeks, respectively.

Another gentleman, Mr. Frank B. Thomas, proved to be most generous with his knowledge of Indian sites. In July, 1968, he guided members of Gillette Chapter along Inyan Kara Creek, Crook County, near his home, to view several aboriginal and paleontologic sites.

This is along the western edge of the famed Black Hills. Undoubtedly here was a prime hunting ground. The Creek today boasts live water whereas, to its south and west, very little can be found. The stream has formed a distinct valley about one-half mile wide. Steep hills and slopes ascend to pine-covered terrain on either side of the Creek. Erosion has been pronounced on the steeper slopes. This cutting action, in the process of forming the valley, has exposed several varieties of workable stone.

To those of us from high, divide country, this reconnaissance proved to be most informative. Along Inyan Kara Creek and the Belle Fourche River as well, we observed an abundance of gray and cream colored chert. Several hillsides contiguous to the road were littered with workshop debris as well as with boulders of the chert. Later I was informed by other members of Gillette Chapter that this material is abundant along the western edge of the Black Hills.

The last stop of the afternoon was a spot on the Al Proctor ranch where Mr. Thomas had previously collected about a dozen crude chert blades. The location was on a west-facing hillside about one quarter of a mile east of the Creek and about one half of a mile east of the Proctor buildings. Gullies with depths ranging from one to six feet interspersed the steep, rocky slope. Adjacent to one gully Mr. Thomas reported making his discovery. Here the ground was littered with hundreds of large percussion flakes, some crude and others delicate.

Some tools and broken implements remained. There was a jasper end scraper, a

quartzite corner notch point (Fig. A), a possible agate perforator (Fig. C), a small biface of metzmorphosed red shale (Fig. D), and ten broken biface knives. Six of these are illustrated (Figures B, E, F, G, H, and I).

Surface evidence indicated that this was a workshop area about twenty five feet square. Approximately seventy percent of these tools and ninty five percent of the flakes were made of the indigenous chert.

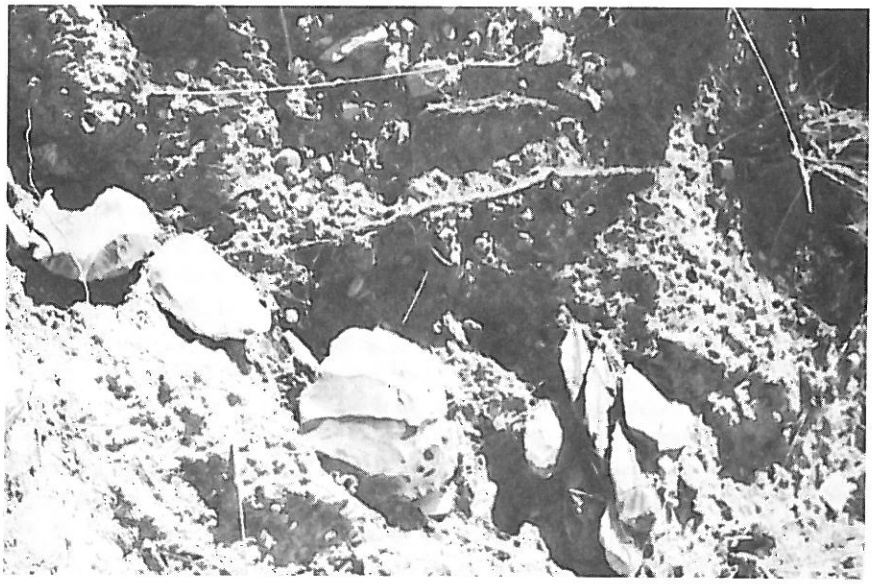
The blade cache was eroding from the head of the nearby gully and was about ten feet from the flake-covered area. Appearance indicated that the twelve blades had been placed in a shallow hole and then covered with soil. Subsequent hillside and rill erosion had exposed them.

Each cache blade was made of local chert. Each blade exhibited heavy patina on one face only. The twelve blades range in length from 3.25 inches to 4.8 inches with an average length of 4 inches. Widths vary from 2 to 3.25 inches with an average width of 2.75 inches. In thickness the range is from .38 to .75 inches. Mean thickness is .62 inch.

Two of the twelve blades were plano-convex in cross section. (See Figures K and L). Specimen L appears to be merely a large percussion flake which happened to possess one or two functional cutting edges; it exhibits neither retouch work nor secondary flaking. Were such a flake found on the surface it would be considered only a debris flake. One might conclude, however, that because it was buried in the cache, the raw but sharp flake was considered a useful tool.

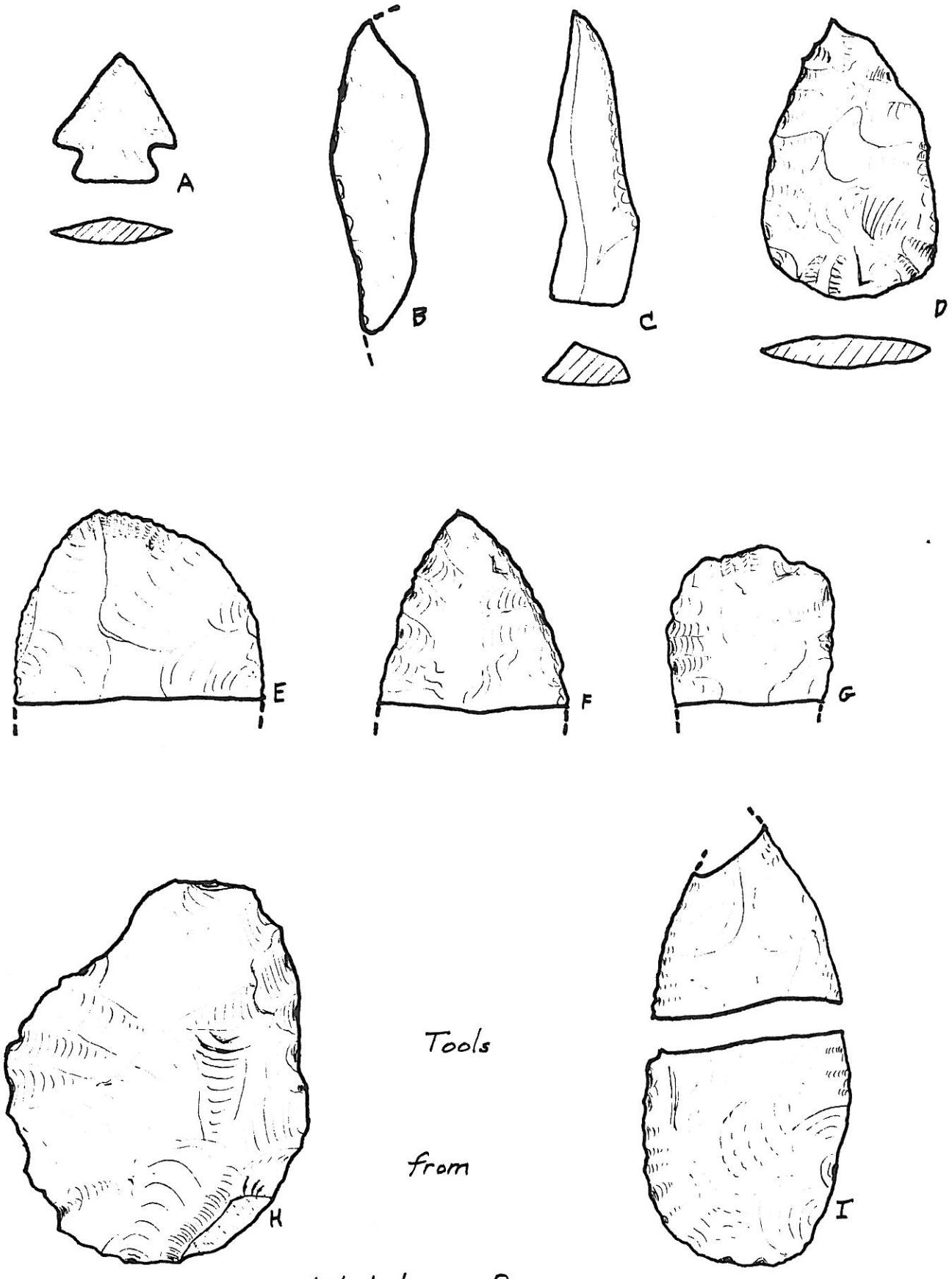
Of the ten bifaces only one might be considered "finished". (Fig. J). It may have undergone pressure retouch; in addition, it seems to be somewhat dulled by use.

An additional four of the cache bifaces are illustrated (Figures M, N, O, and P.)



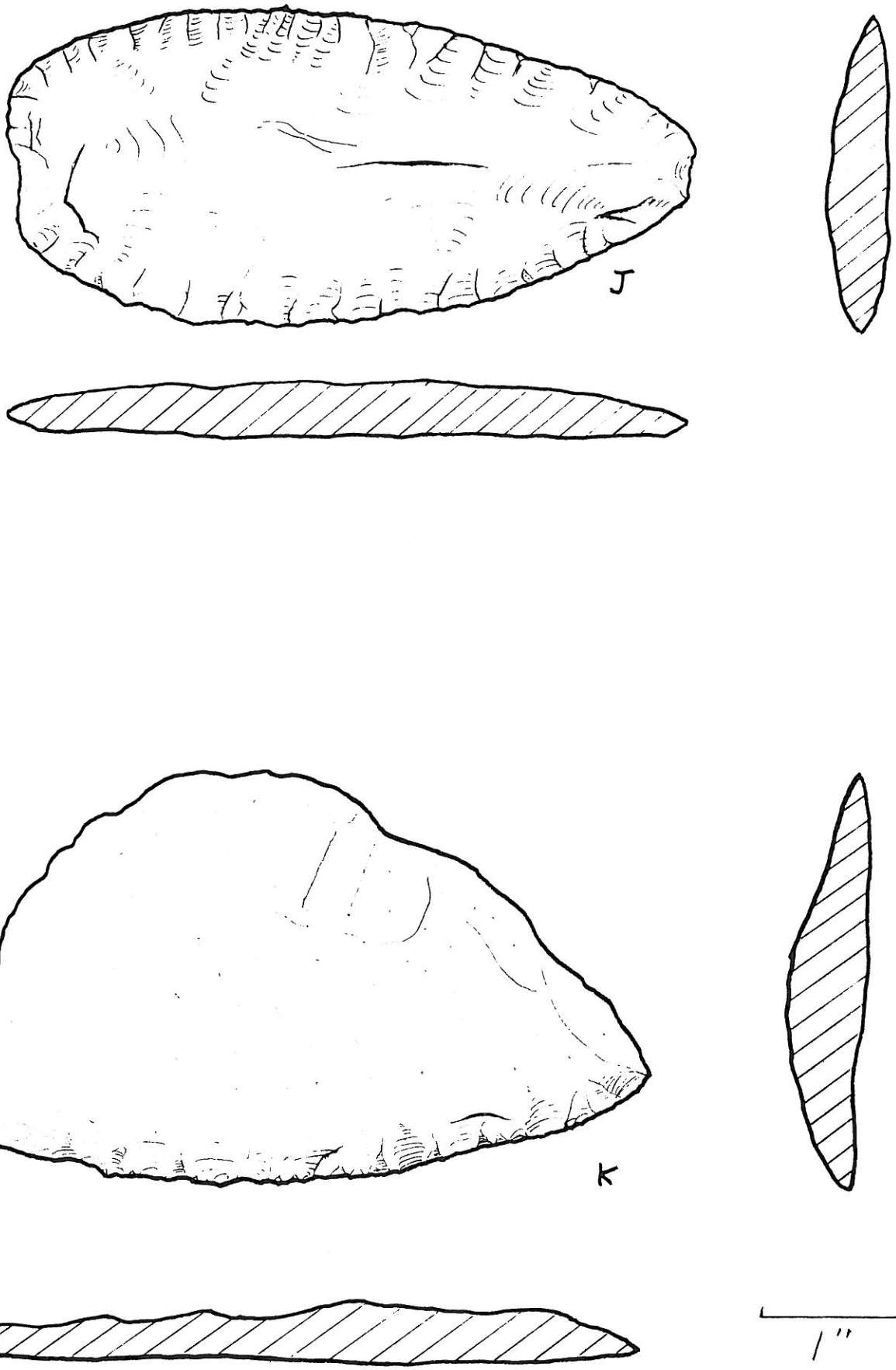
BLADE CACHE ERODING FROM CUT-BANK,

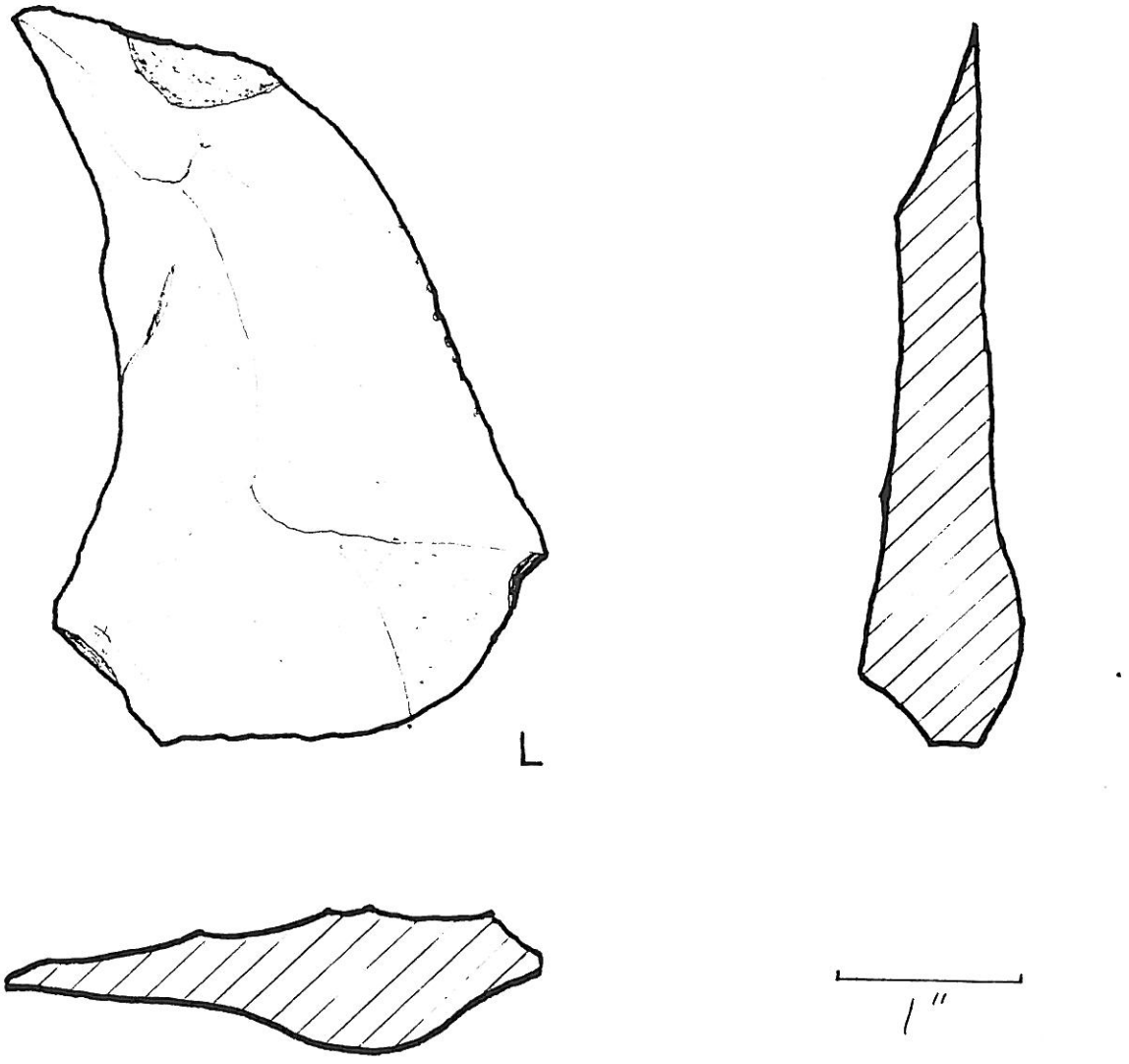
INYAN KARA CREEK, CROOK COUNTY, WYOMING



Tools from Workshop Area.

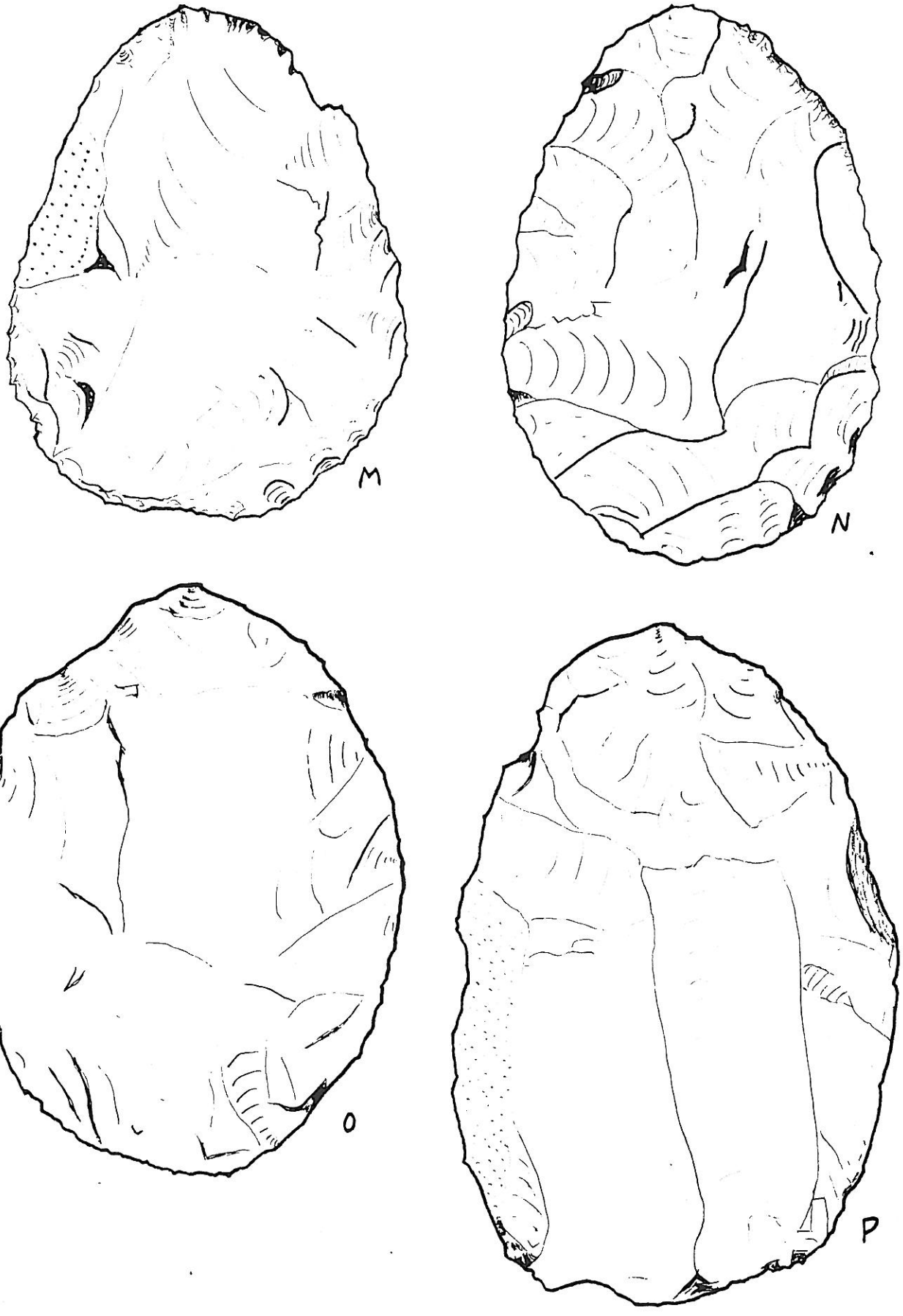
1"


J
K
1"



Percussion Flake

from Inyan Kara Creek Blade Cache.



Bifaces — Inyan Kara Creek Cache

GLASS TRADE BEADS AT FORT LARAMIE

By
Robert A. Murray

(Reprinted from WYOMING ARCHAEOLOGIST, Volume VII, Number 3)

The museum collections at Fort Laramie National Historic Site contain somewhere in excess of 25,000 trade beads. Of these, at least 99% are made of glass. Most of these beads were recovered from archaeolgical excavations related to the restoration of the post trader's store.[1] Test trenching on the site of Fort John yielded an additional quantity,[2] and of course numerous surface finds of the more common types have been made.

The trader's store at Fort Laramie served as an active center for Indian trade from its opening in late 1849, until 1869, when treaty terms theoretically confined the neighboring tribes north of the North Platte River.[3] The post commander, however, made provision for small parties to come to the post. Together with Indian scouts and the families of interpreters and other employees, this made for a limited continuation of trade through 1875.[4] Fort John served as the prime Indian trading post of the region from its construction in 1841 until its occupation by the Army in 1849.[5] Its predecessor, Fort William (not yet precisely located), was active from 1834 to 1841.[6] One might say, then, that the beads in the Fort Laramie collections should be a fairly representative selection of the types traded and used in the area, 1834-1875, a relatively narrow time-span in archaeological terms.

IDENTIFICATION AND CLASSIFICATION OF BEADS

Most ethnological works dealing with beads are primarily concerned with beadwork, the utilization of beads. While they give valuable information on Indian beadwork techniques, and detailed information on styles of beadwork, their identification of beads as such is at best imprecise.[7] Modern archaeology provides evidence that many of the more common bead types changed little in appearance over peiods of several hundred years.[8] During the Fort Laramie period, Venice had been for centuries a leader in bead production, but Britain, France and the Czech states were all producers of beads.[9] No really satisfactory criteria for segregating beads of various points of origin are available. It does not seem impossible that the assembly of data from archaeologically recovered beads, exhaustive research in historical sources, and chemical analyses of glass types and beads from known sources might one day enable students to identify many bead types much more precisely. Until that time, it does not seem profitable to set up an arbitrary typology. Rather it appears more useful to assemble descriptive data on beads from any given site, using such information as apparent manufacturing technique, size and nature of glass.

Basic glassworking techniques are widely described, and at the same time appear to give distinctive characteristics to the beads produced. On this basis, the beads in Fort Laramie collections might be divided into:

those made from drawn glass tubing

those made by winding glass around a mandrel

those made of pressed glass

those made of blown glass

Fort Laramie beads will be discussed under these basic headings, with supplementary observations on modifications of these forms, and on size ranges and colors present.

TUBULAR BEADS

The making of tubing for glass beads is widely described, and appears to vary little from place to place and from time to time.[10] A mass of fluid glass, picked up on a pipe, had a central cavity formed by blowing. With pressure maintained to keep the cavity from collapsing, the mass could be manipulated with tools to produce the desired cross-section. Then, at a certain heat, it was seized with tongs by two workmen and drawn rapidly to a length of as much as a hundred and fifty feet (figure A, plate I). The resultant tube preserved the interior and exterior cross-sectional shape of the original mass, and tapered gradually from the ends toward the center.[11]

The workmen then broke the long tube into sections from two to two and one-half feet long. These sections were sorted by women and children for approximate diameter and broken into bead-lengths by running them against a simple measuring device and breaking them over the edge of a fixed chisel with a blunt tool.[12] These simple sections of tubing served as beads without further alteration. (Number 9098, Plate II) An individual bead of this type appears cylindrical, but actually has a slight taper. Some samples are closely sorted for length and diameter, others vary widely. One specimen of tubular glass beads has been altered by coating them with a white paint (Number 8101, Plate II).

At Fort Laramie, tubular beads with a circular inside cross-section and a hexagonal outside cross-section are much more common than those of cylindrical appearance (Number 8102, Plate II). Alterations of this type tubular bead are common. A single sample (not illustrated) appears to have had the corners rounded by tumbling. A number of others have been ground (as evidenced by striations) with additional facets, usually one or two sets (Numbers 8110, 8109, and 8112, Plate II).

The "Common beads" used for beadwork (and most numerous in finds at Fort Laramie and elsewhere) were made from short sections of drawn glass tubing. These sections were mixed with sand and wood-ashes or with graphite and plaster. The glassworkers placed the mixture in a pan, and brought it to sufficient heat to soften the glass. When stirred, the ends of the tubes rounded off through the combined effects of

stirring and the surface tension of the near fluid glass.[13] In some factories a rotating vessel of iron in a specially made furnace accomplished the same result (Figure B, Plate I). In either case, the packing mixture kept the beads from adhering to one another, and kept the center cavities from collapsing.[14] The resultant bead has the shape of a flattened spheriod, with a smooth-edged center perforation The taper of the tubing from which the basic sections came must have given a rather continuous graduation of diameter within a given batch. Variation in the accuracy of breaking off the sections results in some variations in length, and much variation in the nearness to parallel of the flattened ends. (Assorted sample, Plate II, and Number 3311, Plate II).

Beadwork investigators make much of two sizes of beads, which they refer to as "seed beads" and "pony beads".[15] The mass of common beads in the Forst Laramie collections does not seem to bear out the existence of two size-ranges as distinct manufacturing products. Taken without regard to color or character of glass, common beads at Fort Laramie progress steadily from .04" diameter to .23" diameter! Considering different individual groups of given color and glass type, found as groups, one finds such size ranges within a group as:

.04-.05"
.05-.06"
.05-.07"
.06" (very uniform)
.06-.07"
.06-.08"
.07-.08"
.08-.09"
.08-.10"
.09-.10"
.10-.16"
.11-.14"
.12-.15"
.12-.18"
.13-.14"
.13-.16"
.14-.16"
.14-.15"
.15-.17"
.20-.24"
.21-.23"

Since a given color and kind of glass may be represented over a number of these brackets, it appears possible that sizing was done by some convenient method, such as screening of the assorted sizes produced from the processed tube sections. Beadwork specialists indicate further sorting for uniformity prior to use by the Indian

women doing beadwork.[16] Beads smaller than .06" have such a fine perforation that they are difficult to string on either thread or sinew. Beads larger than about .16" appear to yield undesireable coarseness of design. Within these general limits, though, there are a number of usable size ranges.

The Fort Laramie collections contain common beads in a wide variety color, including:

clear, transparent
slightly milky, transparent
uncolored translucent
white translucent
white opaque
light blue translucent
light blue opaque
medium blue translucent
dark blue transparent
dark blue opaque
blue gray translucent
light green transparent
medium green transparent
light green translucent
light green opaque
dark green transparent
dark green opaque
deep green opaque, with iridescent surface
yellow transparent
yellow translucent
deep yellow translucent
dark yellow opaque
yellow orange transparent
bright orange opaque
pale pink tinted transparent
pink opaque
red transparent
bronze color opaque, iridescent
black opaque

Common beads further processed by grinding on random facets have been found at Fort Laramie, in both lilac-transparent, and black-opaque glass (Number 8122, Plate II).

An interesting variation of the common bead is drawn from a composite tubing, yielding beads with a white-opaque core and a red-transparent exterior. These are plentiful at Fort Laramie, in all common size ranges (Number 8090, Plate II). In addition, one notable specimen is at hand (Number 8084, Plate II). The writer has examined much Ogallala Sioux beadwork of the 1860's to 1880's, in which the small sizes of these red-and white beads were present. Its use as a child's necklace-bead has been noted by Ewers.[17]

A final variant of the common bead at Fort Laramie is one made of opaque-white glass, coated with a pearlescent lacquer. This occurs in three size-ranges, .04"-.05", and .09"-.10", and .13"-.16".

MANDREL-WOUND BEADS

These beads are also referred to as "wire-wound". The process involves heating a rod of glass to the melting point, and drawing out a think thread of glass from it, catching the thread and winding it in spiral fashion on a rotating, tapered iron

mandrel.[18] After the glass hardens, it can be slipped off the mandrel. This technique facilitates the production of larger, thicker-walled beads of more variable design than those of tubing. The making of each individual bead is under the control of the workman, and such beads are thus subject to more variations in workmanship.

Mandrel wound beads are easily identified by their visable spiral grain-structure. The simplest of these are rather poorly made, consisting of a single turn of a coarse rod around the mandrel (Numbers 8060, 8061, and 8062, Plate III). These may have been made in rapid succession, a whole string of them prepared on the same mandrel, since some samples appear to have been broken off at their small ends, and several beads will occasionally be found attached to one another. A given group will sometimes show evidence of a continuous mandrel taper (Number 8062, Plate III).

Some of these hastily-wound beads were further processed by grinding on facets (Number 8118, Plate III).

One sample of single-turn wound bead is coated with coral-colored lacquer (Number 8137, Plate III). It may be one of the type mentioned by Orchard as having been made before the availability of coral-colored glass.[19]

Many of the small red, white and blue beads of this type are very neatly made of many turns of a fine strand of glass, (Numbers 8068, 8071, 8074, and 8078, Plate III).

All of the mandrel-wound beads are of moderate to large size, as will be seen in Plate III. Both their general size range, and observation of these types of ethnological speciments indicates their main use was for necklaces, charms and other specialized decorative items. Mandrel-wound beads with modifications appear in small numbers. One sample, of near-turquoise colored opaque glass, appears to have been wound in conventional fashion, then manipulated while still hot to obtain irregular facets (Number 8097, Plate III). Number 8080, Plate III, is a mandrel-wound bead of very dark red opaque glass, further processed by inlaying a rod of white glass in a spiral for three full turns around it.

The most complex mandrel-wound bead at Fort Laramie is of red transparent glass, with a spiral inlay consisting of a twisted cane of blue and white opaque glass making three full turns (Number 8081, Plate III).

PRESSED GLASS BEADS

Only a few pressed glass beads are present at Fort Laramie. All have the mold-parting mark characteristic of pressed glass items (Numbers 8125, 8138, 8167, and 8189, Plate IV).

BLOWN GLASS BEADS

One sample of this method of bead-making has been found at Fort Laramie. These beads (Number 8126, Plate IV) appear to have been blown from a tubing placed in a mold, producing a connected "chain" of beads, broken apart after being removed from the mold. The uniformity of both the pressed glass and blown glass beads suggests machine production, and might place them near the end of the period.

It appears noteworthy that none of the complex inlaid ploychrome beads such as the Crows and Blackfoot tribes favored (20) have been found at Fort Laramie.

It is hoped that this paper will stimulate closer examination and more precise recording of bead finds by both professionals and amateurs.

NOTES

1. J. W. Hendron, "An Introduction to the Archeology of Fort Laramie", unpublished report, in the files of Fort Laramie National Historic Site, completed in 1941.

   J. W. Hendron, "Beads from Old Fort Laramie", unpublished manuscript, in the files of Fort Laramie National Historic Site, completed August, 1941.

   Paul L. Beaubein, "Preliminary Report of the Archeological Investigations at Fort Laramie National Monument, 1950", unpublished manuscript in the files of Fort Laramie National Historic Site, completed April, 1951.

2. Beaubien, op. cit.

3. Merrill J. Mattes, "The Sutler's Store at Fort Laramie", Annuals of Wyoming, July, 1946, V. 18, #2.

4. L. G. (Pat) Flannery, commented to the writer in 1962 that John Hunton said 1875 was the last year of significant Indian trade at the post. Numerous orders scattered over the years 1868, 1875 in the general orders and special orders of the post give evidence that a small and controlled amount of Indian trade was permitted. The rapid change in Indian affaris in the years 1876-77 resulted in the removal of all Indians from the Fort Laramie region, and the concentration of trade at the agencies in Dakota and Montana.

5. David L. Hieb, Fort Laramie, National Park Service Historic Handbook series, #20, 1954.

6. ibid.

7. Carrie A. Lyford, Quill and Beadwork of the Western Sioux, Bureau of Indian Affaris, 1954, pp. 56-60.

William Hildschut Crow Indian Beadwork (John C. Ewers, ed.), Museum of the American Indian, Heye Foundation, N. Y., 1959, pp. 45-46.

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8. Peter B. Pratt, Oneida Iroquois Glass Trade Bead Sequence, 1585-1745, Fort Stanwix Museum, Rome, New York, 1961.

9. Andrew Ure, M. D., A Dictionary of Arts, Manufactures, and Mines, D. Appleton and Company, New York, 1835, p. 601.

Orchard, op. cit., pp. 82, 83: Lyford, op. cit., pp. 56-60 and 85-86: Ewers, op. cit., pp. 32-35.

10. Ure, op. cit., p. 601.

Benjamin Parks (ed.) Appleton's Cyclopedia of Applied Mechanics: A Dictionary of Mechanical Engineering and the Mechanical Arts, D. Appleton & Co., New York, 1883, p. 50.

Charles G. Warnford Lock (ed.) Spon's Encyclopedia of the Industrial Arts, Manufactures andCommercial Products, E. & F. N. Spon, London, 1881, p. 1072.

Edward H. Knight, American Mechanical Dictionary, Houghton Mifflin Co., N. Y. 1881, p. 254.

11. Lock, op. cit., p. 1072.

12. Park, op. cit., p. 50, and Ure, op. cit., p. 601.

13. Knight, op. cit., p. 254.

14. Ibid.

15. Ewers, op. cit., p. 34-35, Lyford, op. cit., p. 56-58.

16. Lyford, op cit., p. 57.

17. Ewers, op. cit., p. 33.

18. Orchard, op. cit., p. 82.

19. Orchard, op. cit., p. 86.

20. Orchard, op. cit., p. 89, Ewers, op. cit., p. 33

781.

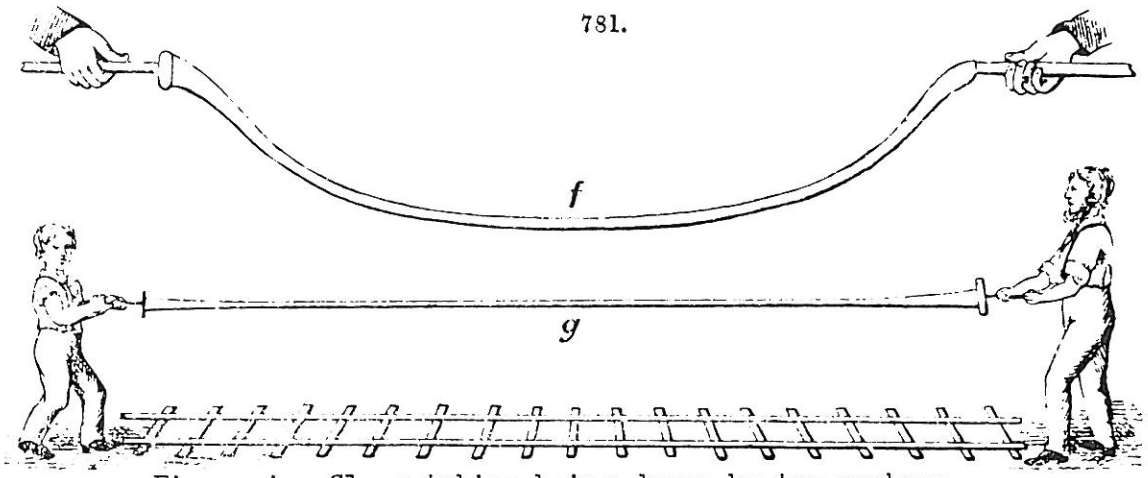


Figure A. Glass tubing being drawn by two workmen (from Spons' Encyclopedia of the Industrial Arts, Manufactures, and Commercial Products, p. 1072)

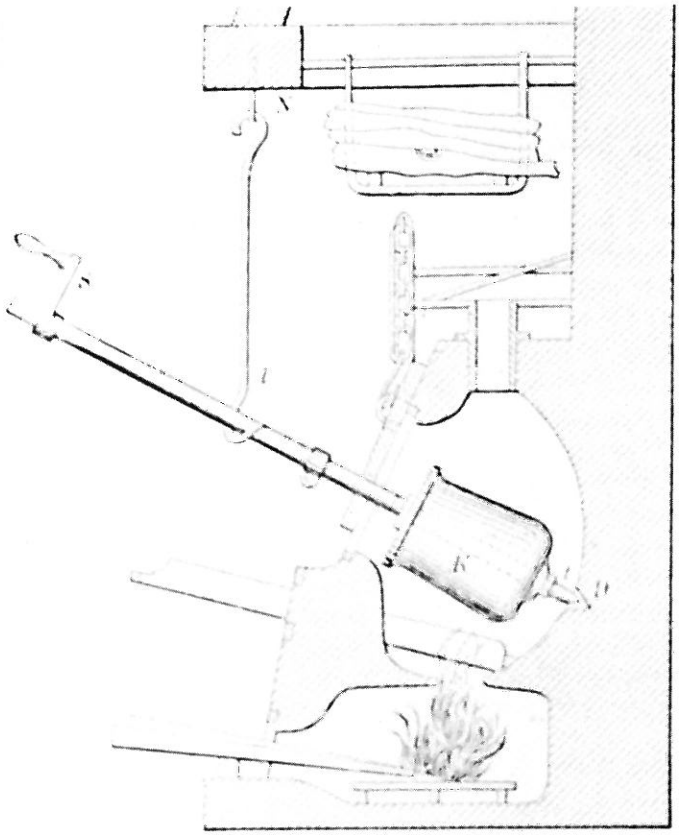
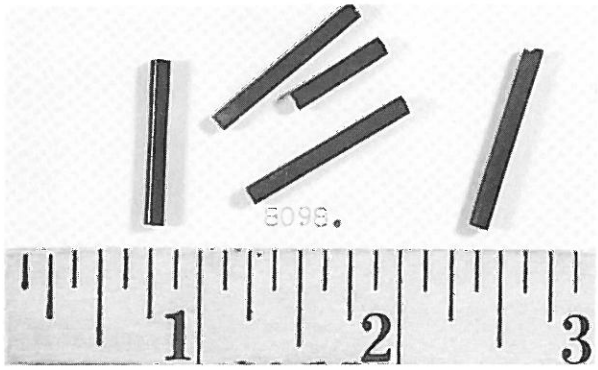
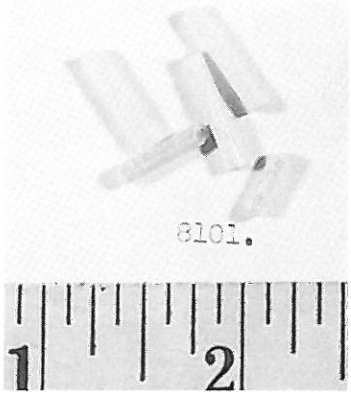


Figure B. A furnace used for finishing common beads. (from Knight's American Mechanical Dictionary, p. 254)

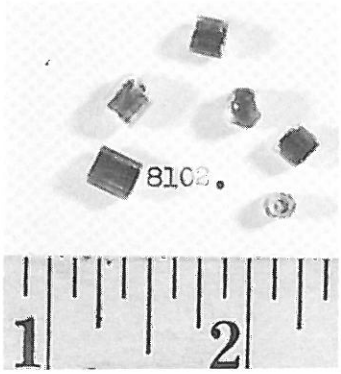
Plate I



8098 drawn glass tube,
deep red translucent



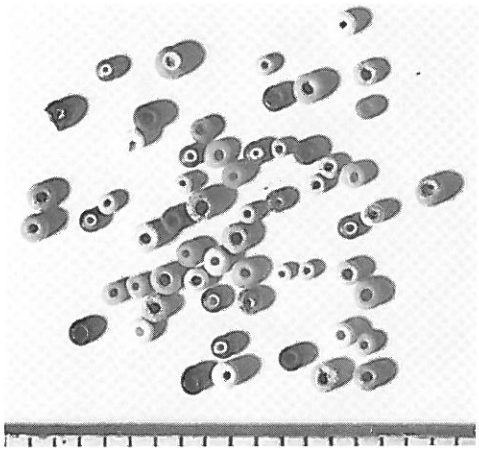
8101 drawn glass tube,
white paint coated



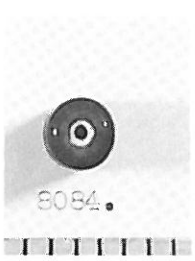
8102 hexagonal
tubing, clear

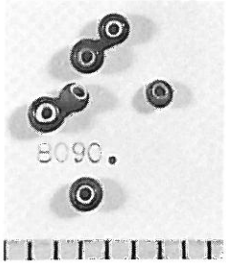
8110 hex. tube,
ground facets, blue

8109 hex. tube,
ground facets, blue
8112 same, green

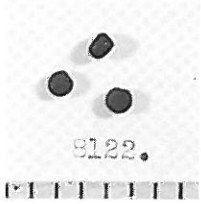


Assorted common beads
3311 irregular, common, white





8084 & 8090, red transparent
exterior, white-opaque interior

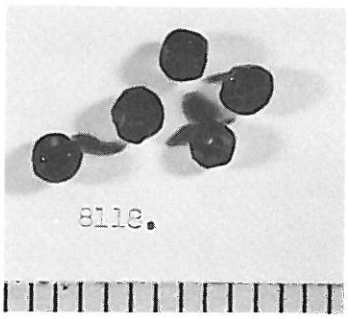


8122 common black opaque
with random-ground facets

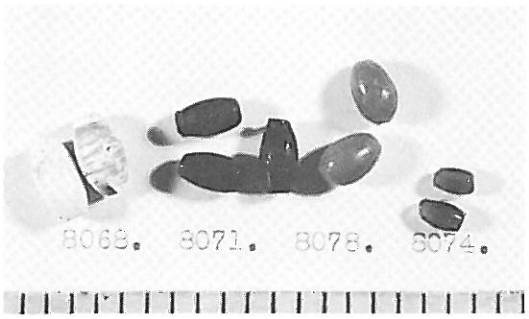
GLASS TRADE BEADS AT FORT LARAMIE

Robert A. Murray

8060 green transparent
8061 clear transparent
8062 amber transparent
Crude single-turn beads, some surface-scale from long period underground

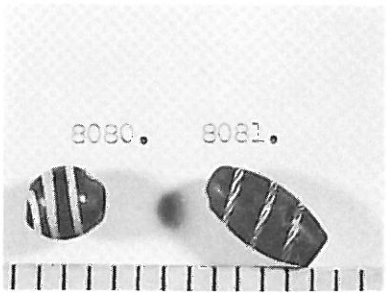


8118 crude single-turn wound beads, deep-green transparent, random facets ground on.



8068 white opaque with some scale
8071 deep red translucent
8078 opaque light blue.
8074 transparent red

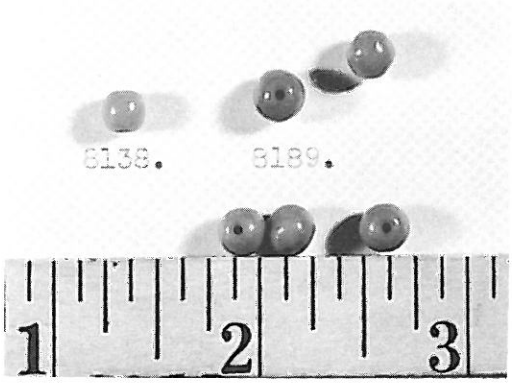
8075 light-blue opaque
8077 very light-blue opaque



8079 turquoise-green opaque, pressed-facets
8137 single-turn wound, white glass with coral-lacquer
8080 deep red opaque, with white inlay
8081 red transparent, with blue-and-white inlay

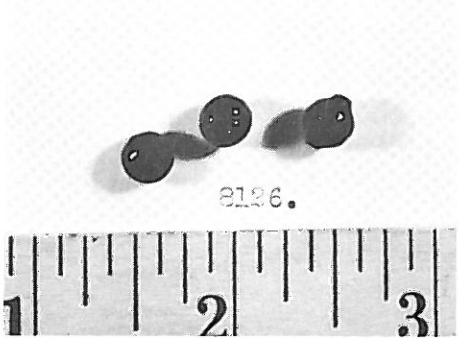
Plate III Mandrel-Wound Beads

8138 pressed-glass, coral colored
8189 pressed-glass, light-blue opaque



8125 pressed-glass, red opaque

8167 half of a pressed-glass, white-opaque bead, with raised equatorial-belt



8126 blown-glass, black-opaque, regular facets, appears to be blown-in-mold