

ABSTRACT OF MINUTES
-OF THE-
COLORADO SCIENTIFIC SOCIETY,
FOR THE YEAR 1887.

OFFICIAL PART.

THIRTY-NINTH REGULAR MEETING.

JANUARY 3D, 1887.

In the Society Rooms, County Court House.

The Vice-President, P. H. van Diest, in the Chair.

The Executive Committee requested and were granted the power to use their discretion in regard to dropping the names of certain delinquent members from the rolls.

BUSINESS OF THE ANNUAL MEETING.

The following annual reports were submitted :

Report of the Secretary of the Colorado Scientific Society for the year 1886.

Gentlemen :

I herewith respectfully submit a report of the progress of the Society during the past year, and of its condition at the present time,—the beginning of a new year. The statements and figures which I have to submit, together with those from the Museum, show conclusively that the growth of the Society in various directions has been proportionate to the endeavors in those directions. Where

any marked effort has been made there has been a corresponding result, and where apathy prevails there has been little or no gain. Let those members who think that the growth of the Society has been too exclusively in certain directions, remember that they are personally responsible for our development in the lines in which they are personally interested. No offers of aid have been declined; no practical suggestions slighted.

MEMBERSHIP.

New members elected,	13
Member resigned,	1
Total active membership January 1, 1887,	51
Gain during year,	12

The gain is encouraging, especially when we remember that during 1885 there was a net *loss* of three in the membership.

MEETINGS.

Number of regular meetings held,	9
Total number of members present,	91
Giving an average attendance of	10
Number of visitors at meetings,	15
Largest number present at any meeting, December,	18
Smallest number present at any meeting,	7

In comparison with the preceding year these figures show a slight gain in attendance. A decided gain in this respect is hoped for in the coming year.

COMMUNICATIONS.

Number of members contributing original written papers,	9
Number of papers,	15
Papers read by invitation,	3
Number of members contributing notes,	6
Number participating in discussions,	11

There is a gain in the number of papers, but the number of members contributing is the same as in 1885. More persons take part in discussions now than formerly, but this feature is by no means as prominent as it should be.

PUBLICATION.

Part I of Volume II of the Society's Proceedings was issued in May. Part II, containing papers of the past year, will be published as soon as possible.

EXCHANGES.

By means of our Proceedings we have come into friendly relations of exchange with a number of foreign and domestic Societies and Institutions. We now receive the publications of 9 State Institutions, and of *one* private; of 12 Domestic Scientific Societies, and of 10 Foreign. Particular efforts will be made during the coming year to enlarge this list.

THE LIBRARY.

No systematic record of accessions has been kept until within a few months. But few bound volumes have been added. Since June there have been received 12 complete volumes; 45 parts of volumes; 3 pamphlets, and one map. A catalogue of everything now in the library will soon be prepared.

THE MUSEUM ROOM.

In September the Executive Committee secured from the State Historical Society the use of a part of the room occupied by it, situated adjacent to our own, for general museum purposes. The mineral and rock collections were then transferred to the new quarters. Shortly afterward the collections of the Historical Society were removed, and we now have full possession of this room, through the courtesy of the County Commissioners.

CASES.

Since the new room has been secured eight glass cases have been purchased, and in these the mineralogical collection is now being systematically arranged.

THE MUSEUM FUND.

Early in the year an appeal for aid in building up our collections was drawn up by the Executive Committee and printed as the heading to a subscription list. This list was circulated privately, to a limited extent, by a few of the members, and several generous donations were secured. The amount paid in to this Fund in 1886 was \$175.00. The further circulation of this subscription list is most earnestly desired.

Respectfully submitted,

WHITMAN CROSS, *Secretary.*

Report of the Treasurer of the Colorado Scientific Society for the year 1886.

DR. 1886.		CR. 1886.	
To Receipts:	\$	By Expenditures:	\$
Jan. 4. Balance in Colorado National Bank,	211 98	Printing Proceedings, Vol. II, Part I,	46 66
To cash in hand,	4 50	Miscellaneous printing, . .	20 25
Membership dues received during the year,	470 00	Minerals and collecting expenses,	86 00
Subscriptions to Museum Fund, paid,	175 00	Museum cases, book-case and repairs,	206 85
Sale of Proceedings,	55	Books and periodicals, . .	21 00
		Postage and stationery, . .	17 70
		Miscellaneous room furnishings,	9 50
		Freight, expressage, drayage	8 71
		Janitor,	14 00
		Dec. 31. Balance in Colorado National Bank, . .	383 36
		Cash in hand,	50 00
	\$864 03		\$864 03

WHITMAN CROSS, Treasurer.

Correct: E. W. ROLLINS,

P. H. VAN DIEST,

WM. P. HEADDEN.

Report of the Curators of the Colorado Scientific Society for the year 1886.

I. ADDITIONS TO THE MINERALOGICAL COLLECTION.

Donated—

- By *A. W. Anthony* : pyrite, rhodochrosite, San Juan Co.
 By *F. F. Chisolm* : native sulphur, Routt Co.
 By *Whitman Cross* : chabazite, thomsonite, mesolite, analcite (many duplicates of all), Jefferson Co.; zircon, cryolite, pachnolite, prosopite (duplicates of all), El Paso Co.; rhodochrosite, Park Co.; cerussite, Leadville; calcite, San Juan Co.; pectolite (2), N. J.; spodumene, asbestos, staurolite, wulfenite, Mass.; rutile, arsenopyrite, Georgia; brookite, Ark.; topaz (5) Devil's Head; tourmaline (2), Brazil; wolframite (3), calcite, natrolite, Bohemia; apatite, Canada.
 By *J. V. Dexter* : native silver, galena (2), silver ore, rhodochrosite, cerussite, limonite, chalcopyrite, Park Co.; pyrite, Gilpin Co.; göthite, native copper, Lake Superior; gypsum, Douglas Co.; fluorite, England.
 By *G. H. Eldridge* : native gold, Idaho.
 By *J. B. Farish* : native gold, Oregon.
 By *Rev. H. M. Hart* : aragonite, Ft. Collins, Col.
 By *Prof. W. P. Headden* : jarosite, Leadville; cryptolite, N. Y.
 By *R. C. Hills* : tremolite (6), smithsonite, Gunnison Co.; carnallite, Germany.
 By *J. G. Hiestand* : allunogen, Huerfano Co.
 By *F. Mentzel* : zunyite, enargite, hübnerite (3), San Juan Co.
 By *R. Pearce* : crocidolite, S. Africa; tyrolite, brochantite, calcophyllite, pharmacosiderite, clinoclasite, olivenite, erinite, azurite, enargite (with many duplicates) Utah.
 By *J. A. Porter* : wulfenite, Nev.; limonite, Silverton.
 By *J. S. Randall* : alabandite, Summit Co.

- By *L. D. Ricketts* : bismuth ore (2), Ouray Co.; bismuth ore, sphalerite, hübnerite (4), San Juan Co.; cerussite and embolite, dechenite and descloizite, Leadville; native copper and cuprite, England; native silver, La Plata Co.
- By *S. G. Sackett* : native gold, mercury, undetermined tellurides (2), La Plata Co.; chalcopyrite, San Juan Co.
- By *C. G. Slack* : smithsonite, Pitkin Co.; copper ores, Lake Superior.
- By *W. B. Smith* : microcline (3), albite (3), smoky quartz (2), topaz, fluorite, Devil's Head; garnet (3), Chaffee Co.
- By *T. M. Trippe* : polybasite, Ouray Co.
- By *P. H. van Diest* : native gold, pyrite, Summit Co.; tellurium minerals, Boulder Co.; cassiterite, 15 samples illustrating the principal stream tin deposits of the islands of Banca and Billiton.
- By *E. C. van Diest* : native silver, Mexico.
- By *R. F. Wrigley* : vesuvianite, stibnite (3), undetermined telluride, San Juan Co.; sphalerite, emplectite (?)
- By *N. D. Wanemaker* : zeolites, Jefferson Co.

Purchased or Collected by the Society—

Cerussite, Leadville; garnets (3) Salida; pyrite, Gilpin Co.; zeolites (15), Golden; phenacite (8), tysonite, bastnäsite, microcline (7), göthite (5), El Paso Co.; gadolinite (2) Park Co.

II. ADDITIONS TO THE LITHOLOGICAL COLLECTION.

Donated—

- By *W. B. Smith* : 5 hand specimens of rhyolite representing occurrences of this rock at Florissant, Nathrop and Dawson's Butte, Colorado; 1 specimen of phonolite from Hayden Divide, and 1 specimen of pitchstone from Georgetown, Colorado.

- By *Whitman Cross*: 2 hand specimens of steinmark from Rochlitz, Saxony; 1 specimen of pitchstone from Meissen, Saxony; one specimen of opal from Buffalo Peaks, Col.; 3 specimens of pyroxene-andesite from near Salida, Col.; 1 specimen of quartz-porphyrity from Sheep Mountain, Eagle Co., Col.; 2 specimens of diabase, 1 of tufaceous rhyolite, 1 of gneiss, 1 of andesitic-tufa, and 1 of rhyolite, from the neighborhood of Silver Cliff, Colo; 1 specimen of Carboniferous sandstone from Colony Creek, Sangre de Cristo Range, Col.; 2 specimens of sandstone illustrating part of the Tertiary formation of Green Mountain and Golden, Col.
- By *F. F. Chisolm*: 2 hand specimens of nepheline-tephrite in illustration of his paper on "The Anthracite Coal Field of the Elk Head Mountains."
- By *R. C. Hills*: 3 hand specimens of quartz-mica-diorite from Snowmass and Ragged Mountains, Col.; 1 specimen of diorite from the mouth of Avalanche Creek, Col.; 1 specimen of andesite and 1 of basalt from Mount Gunnison, Col.; 1 specimen of eruptive tufa from the Muddy Fork of the Gunnison, Col.; 1 specimen of quartz-porphyrity from Sheep Mountain, Col.; 16 hand specimens representing the metamorphic rocks of Crystal River and Yule Creek, Gunnison Co., Col.

III. ADDITIONS TO THE PALÆONTOLOGICAL COLLECTION.

Donated—

- By *Whitman Cross*: 1 specimen of fossil fern from Mazon Creek, Illinois.
- By *A. C. Chanute*: Portions of two elephant teeth from the Quarternary beds near the Holden Smelter, Denver, Col.
- By *J. V. Dexter*: 1 fossil plant from Middle Park; 1 fossil plant from Florissant, Col.; 2 fossil fishes from the Green River Tertiary of Wyoming.

By *G. L. Cannon, Jr* : Fossil remains, mostly fragmentary, of the Quarternary horse, camel, buffalo, crocodile, turtle, and various species of rodents.

By *R. C. Hills* : 3 specimens of fossil plants from the coal measure at Cañon City, Col.; 4 fossil plants from the coal measure at Slate Mountain, Gunnison Co., Col.; and 2 fossil plants from the coal measure on the North Fork of the Gunnison, Delta Co., Col.; 30 fossil shells, mostly species of *inoceramus*, *ostrea*, *gryphea* and *cardium* from the Upper Cretaceous and Laramie of different Colorado localities.

Purchased—

17 specimens of Tertiary plants from Florissant, also, from the same beds, 4 specimens of plants and two of insects collected at the expense of the Society.

TOTAL NUMBER OF ACCESSIONS.

Minerals,	250
Rocks,	50
Fossils,	77

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—OF THE—
COLORADO SCIENTIFIC SOCIETY,
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OFFICIAL PART.

FORTIETH REGULAR MEETING.

FEBRUARY 7TH, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

Mr. William H. Jackson, of Denver, was elected a member of the Society.

The Executive Committee announced the appointment of R. C. Hills as Curator, and Whitman Cross as Librarian. These officers were authorized to appoint Assistants.

COMMUNICATIONS.—The following named paper was read :

By W. B. Smith, "Mineralogical Notes, I."

FORTY-FIRST REGULAR MEETING.

MARCH 7TH, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

Messrs. Bradford Locke, of Central City, Colo.; J. Wilson Hart and John Rapelji, of Denver, were elected members of the Society.

COMMUNICATIONS.—No formal papers were presented.

FORTY-SECOND REGULAR MEETING.

APRIL 4TH, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

COMMUNICATIONS.—The following papers were read:
By Walter B. Smith, "Mineralogical Notes, II."
By W. H. Jackson, "Cliff Dwellings and Ancient Pueblos in Colorado and New Mexico."

FORTY-THIRD REGULAR MEETING.

MAY 2D, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

Mr. Fred. Roeser, of Denver, was elected a member of the Society.

COMMUNICATIONS.—The following named papers were read :

By Whitman Cross, "Note on Phonolite from Colorado."

By the same, "Note on Slipping-planes and lamellar Twinning in Galena."

By Richard Pearce, "Note on Pharmacosiderite from Utah."

By Walter B. Smith, "Mineralogical Notes, III."

FORTY-FOURTH REGULAR MEETING.

JUNE 6TH, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

COMMUNICATIONS.—There were no formal papers.

Dr. Headden described a deposit of infusorial earth recently found in West Denver, and Mr. Whitman Cross made some preliminary remarks on the paramorphosis of certain minerals.

FORTY-FIFTH REGULAR MEETING.

JULY 1ST, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

COMMUNICATIONS.—The following named papers were read :

By F. F. Chisolm, "Further Notes on the Elk Head Anthracite Coal-field.

By T. W. Stanton, "Palaeontological Notes."

FORTY-SIXTH REGULAR MEETING.

OCTOBER 17TH, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

The meeting was postponed from October 3d by the President. The Secretary being absent, Mr. T. W. Stanton was appointed Secretary *pro tem*.

Mr. Henry E. Woodward, of Aspen, Colo., was elected a member of the Society.

COMMUNICATIONS.—The following named papers were read :

By Richard Pearce, "Note on a Mineral supposed to be a Mixture of Bornite and Stromeyerite."

By S. F. Emmons, "On the Origin of Fissure Veins."

By Wm. P. Headden, "A method for determining Zinc in Ores.

By P. H. van Diest, "Natural Gas in Boulder County."

FORTY-SEVENTH REGULAR MEETING.

NOVEMBER 7TH, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

An addition to the By-Laws to constitute section 21, proposed by Mr. Whitman Cross, was read.

COMMUNICATION.—By S. F. Emmons, "On Glaciers in the Rocky Mountains."

FORTY-EIGHTH REGULAR MEETING.

DECEMBER 5TH, 1887.

In the Society Rooms, County Court House.

The President, P. H. van Diest, in the Chair.

The additional section of the By-Laws, proposed at the November meeting by Mr. Cross, was adopted, as follows :

“SECTION 21. Papers, abstracts of papers, and accounts of meetings, may be published in advance of the Society’s ‘Proceedings,’ *provided*, that such publication is approved by the Executive Committee. All such articles must be submitted to the Secretary before the issue.”

Nominations of officers for the year 1888 were made as follows :

President,	R. C. HILLS.
Vice-President,	WM. P. HEADDEN.
Secretary,	T. W. STANTON.
Treasurer,	E. W. ROLLINS.

EXECUTIVE COMMITTEE.

RICHARD PEARCE,	W. H. JACKSON,
P. H. VAN DIEST,	L. D. RICKETTS,
W. B. SMITH,	WM. P. HEADDEN,
E. W. ROLLINS,	H. BEEGER,
G. C. MUNSON,	J. B. GRANT.

COMMUNICATIONS.—The following named papers were read :

By W. B. Smith, “Notes on some new Phenacites from Mt. Antero, Colorado.” (See Mineralogical Notes, III.)

By Whitman Cross, “Note on some eruptive Rocks from Custer Co., Colo.”

By S. F. Emmons, “Preliminary Notes on Aspen, Colo.”