BUFFALO ASTRONOMICAL ASSOCIATION INC.
BUFFALO MUSEUM OF SCIENCE
HUMBOLDT PARKWAY
BUFFALO NEW YORK 14211

the Spectrum

Editor:
Lawrence M. Carlino

SEPTEMBER - OCTOBER 1977

SEPTEMBER MEETING: B.A.A. president Dr. Fred Price and Spectrum editor Larry Carlino will offer a joint presentation on "Recent Visual Observations of Jupiter" at our September 9, 1977, meeting. As has become customary in the past few months, the meeting will be held in the New Science Building Auditorium of the State University College at Buffalo(Buffalo State)beginning at 8:00 p.m. Slide reproductions of drawings made during the 1976-77 apparition of the giant planet will illustrate some of the fascinating changes in cloud belt detail and the near disappearance of the Great Red Spot.

OCTOBER MEETING: The October meeting of the B.A.A. will take place on October 14, 1977, at 8:00p.m., again in the New Science Building Auditorium. A number of interesting speakers are "tentative" for the meeting, and a definitive program choice will be announced at the September gathering.

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FROM THE NEW EDITOR:

It is with a very real sense of excitement and challenge that I assume the editorship of The Spectrum. Certainly, filling the shoes of Ernst Both will not be a simple task, for Ernst has done a truly magnificent job throughout his tenure as editor. I'm sure that I speak for the entire membership in extending Ernst our sincere thanks. I pledge my very best efforts in keeping The Spectrum a viable and entertaining publication, one which well serves the needs and interests of the B.A.A.

Yet, I can't do the job entirely on my own. Surely, I could try to maintain the six-page format of The Spectrum by reaching into the depths of my English major background and pulling forth a variety of wretched hyperboles and dying metaphors in order to fill the pages - but there is a better way. Your contributions are needed. The individual and collective expertise of our membership on the full range of astronomical topics is impressive indeed. An occasional short article (or perhaps a sketch or astrophoto) dealing with any astronomy-related topic of personal interest would go a long way in adding "spice" to our newsletter. Contributions need not be neatly typed, but simply sent my way in a somewhat legible form by the 20th of the month preceding publication.

Then too, I solicit any and all ideas on possible changes or additions to The Spectrum. Perhaps monthly star charts or observing guides would be desirable, or a regular section on amateur telescope making? Two such new sections debut in this issue: the "B.A.A. Profile," an in-depth look at a prominent B.A.A. member; and "Sky Test," an appraisal of commercially-made telescopes or related equipment. Please, let me know how you like them, and by all means, bombard me with ideas and articles in the manner of the great Leonid meteor shower of '66.

L.M.C.

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FROM THE PRESIDENT:

In my annual report given during the June business meeting, I spoke about, among other things, the continuing association of the B.A.A. with Buffalo State College. For the benefit of the members who were not present, I have written the following summary of the points I made in that statement.

Over the past few months, some members have asked me, "When are we going back to the Museum of Science?" The reasons given for why we should do so are three-fold. First, the B.A.A. is traditionally associated with the Museum. Second, theB.A.A. has always met at the Museum(which, however, is not quite true as we have been meeting at Buffalo State since September 1976). Third, the advantages of affiliation with the Museum and the Buffalo Society of Natural Sciences(BSNS) are quoted. These are: availability of meeting rooms at the Museum, use of the Kellogg Observatory, availability of the Curator of Astronomy(Ernst Both), the Museum staff will refer people interested in astronomy to the B.A.A., it is good for us to be able to say that we are affiliated with the BSNS. The first two reasons remind me of a joke in which a cave man, on being urged to take advantage of the invention of the wheel, stubbornly continues to drag a heavy load along the ground by hand, insisting that he has <u>always done it this way</u>. Regarding the third, none of the advantages of Museum/BSNS affiliation need be lost if we continue to meet on campus. In addition, we have a more comfortable meeting place at Buffalo State and much better auditorium facilities; these cost us <u>NOTHING</u> - an important consideration these days. Buffalo State's open campus welcomes us as a non-profit scientific organization using its facilities, and it augments the College's community service function.

It is good for the B.A.A. to be associated with academic astronomy. Drs. Mack and Orgren of the Geosciences Department have addressed our association and have invited us to presentations in the planetarium just across from the auditorium. I am sure that they will encourage students to join us. We are fortunate in now having Dr. Mack on our Board of Directors.

During its recent public appeal for financial aid, the Museum of Science asked the community to "Help an old fossil." Does the B.A.A. really want to be associated with an "Old Fossil," as the Museum calls itself, rather than with a living and vibrant community like Buffalo State? The B.A.A. took a step forward in recent years when the club's telescope was moved to Beaver Meadow and the new observatory established there. In my opinion, the B.A.A. took another step forward in becoming associated with an academic institution. Furthermore, there is nothing unusual in scientific societies changing their meeting places(as one witnesses in the history of the British Astronomical Association). Going back to the Museum would be a regression, motivated by ill-advised traditionalism and irrational resistance to desirable change. It would make about as much sense as moving Beaver Meadow Observatory back to Newstead. Continuance of our association with Buffalo State will be forward-looking, sensible evidence of desire for growth and progress that will add to our stature. We would be foolish to revert to the old habit. In continuing our association with Buffalo State, we can still retain affiliation with the BSNS and enjoy the additional benefits stated above.

I am confident that the majority of B.A.A. members favor growth and progress and will want to make Buffalo State their permanent meeting place.

Fred W. Price

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THE SECRETARY REPORTS:

CLUB BUSINESS: Two seats on the Board of Directors will be filled at the September meeting. Larry Carlino and Walt Whyman tied for the third member-at-large seat in the June election, and it was voted that a run-off election be held in September. In addition, Ernst Both is resigning from the Board after many years of service. Club by-laws require that, in the event the Curator of Astronomy of the Buffalo Museum of Science is not a Board member, his position may be taken by a research associate or a member of the College of Fellows. Ernst recommends Dr. Jack Mack for this position. Dr. Mack, however, was elected to a two-year term on the Board as a member-at-large beginning September 1, 1977. Perhaps positions can be juggled so that all who received a large number of votes in June can be seated.

We will also vote on updating the by-laws of the B.A.A. at the September meeting. The significant revisions are given below, but corrections of wording and minor details are not included. All of the changes, with the exception of ArticleII, Section 9, will be discussed at the Board meeting preceding the September meeting.

Rowland A. Rupp
Secretary

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Proposed revisions to the by-laws of the Buffalo Astronomical Association, Inc. **

ARTICLE I - MEMBERS

Section 1 - Membership:

B. Student members who are full-time students at recognized institutions of learning.

E. Family membership shall include at least one member eighteen years of age or older and members of his immediate family. (Previously, student membership was extended to anyone sixteen or younger, and family membership was not defined.)

Section 3 - Application for membership: A prospective member shall submit an application to the Membership Chairman or any officer. Membership shall be accepted by signature of the Membership Chairman or officer and full payment of dues by the applicant. The President, or his representative, shall introduce the new member to the general membership as soon thereafter as practical. (The present By-laws call for a sponsoring member and then a review by the Board before a new member can be accepted.)

Section 6 - Quorum: (The change will require 20% of the total membership to be present to transact business instead of 10% as it now stands.)

Section 7 - Voting: Each Member, Fellow, or Honorary Member in good standing shall be entitled to one vote. All family members eighteen years of age or older shall have one vote. Student members shall have no voting privileges. (The changes extend the vote to honorary members and define family voting privileges. The remainder of the paragraph deals with voting procedure and is unchanged.)

Section 8 - Dismissal: Under extraordinary circumstances, the Board may dismiss any member. The Board and the member considered for dismissal shall be notified at least one week in advance of the meeting wherein the dismissal shall be voted upon. The member considered for dismissal may attend the meeting at his discretion. Dismissal shall require the unanimous vote of the convening Board less one. If the member considered for dismissal is a member of the Board, he may not vote. The dismissed member shall be notified of his dismissal in writing. Dismissed members may not make application to the Association for re-admittance until one year has elapsed since dismissal. (The present By-laws contain no provision for dismissal of a member.)

ARTICLE II - BOARD OF DIRECTORS

Section 1 - Number and Election: The Board of Directors shall consist of ten members as follows:

A. Three permanent members of whom one shall be the Curator of Astronomy of the Buffalo Museum of Science, or a research associate in astronomy at the Museum, for as long as the B.A.A. is affiliated with the Museum. Another shall be a fellow nominated by the College of Fellows and elected by a majority of the voting membership. The third shall be the Observatory Director. In the event there is no Curator of Astronomy or research associate, his seat shall be filled by a second Fellow. (At present, we have nine Board members. The Observatory Director is being added.)

Section 4 - Meetings: The President shall designate a chairman and notify him at least forty-eight hours before the meeting or chair the meeting himself. (We presently rotate the chairmanship alphabetically.)

Section 8 - Appointments: The Board of Directors shall appoint the Observatory Director and the editor of The Spectrum annually. (This is an added section.)

Section 9 - Replacement of a Board Member: In the event that an officer, Member-at-Large, or Fellow cannot complete his term, an election shall be held to select his replacement. If fewer than six months remain in his term, the position may be left vacant at the discretion of the Board. (This is an added section)

ARTICLE IV - FINANCES

Section 1 - Dues: Annual dues shall be determined by the Board of Directors. Dues shall be pro-rated semiannually for new members who join during the year. Dues will include a subscription fee to The Spectrum. (Presently, the by-laws define the dues and stipulate that the vote of the general membership is necessary to change them.)

ARTICLE V - BEAVER MEADOW OBSERVATORY

Section 1 - Observatory Director: The Observatory Director shall be Appointed annually by the Board of Directors. He shall over-

ARTICLE V, Section1 (cont'd)

see all activities at the observatory including observational and educational programs. He shall maintain the equipment and recommend new equipment. He shall maintain an observatory use log and schedule observation time when necessary. He shall report on observatory activities at the annual business meeting and to the Board upon request.

Section 2 - Finance: The Board of Directors shall approve all expenditures for observatory activities which shall be drawn from the observatory fund. The Board may direct the transfer of funds between the observatory fund and the general fund when necessary. The Observatory Director may spend up to $50 annually for the observatory without Board approval. The Treasurer shall reimburse him upon submission of a bill. (This article has been added.)

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SPY and Tell

Michael Krasner returned from California in August after a 10,000 mile trip which took him from San Diego to Vancouver and back. He barely missed several disasters. He broke even at Vegas and luckily was not in the casino that was filled with gas. He was in San Diego when police were shooting at each other in a border incident involving drugs. He was in Santa Barbara two days before the town burned. Glad Michael escaped all of these disasters and is home safe and sound. A visit to Meteor Crater in northern Arizona was a highlight of his trip. ***

Irving Goetz bought an 8" Coulter mirror which he has mounted in the 'scope in his back yard. A dome houses his ten inch. ***

Orrin Christy has a rare accomplishment to his credit. He took a speed reading course and achieved the remarkable official score of 34,000 words per minute, with a retention of 70% of the material read. Congratulations, Orrin! He can read a paperback book in from three to five minutes. Anyone want to volunteer to turn pages? * Orrin was general chairman for the B&T Power Boat Association's Grand Island Marathon '77 on Sunday, August 14th. * He started an observatory dome in his back yard at the beginning of the summer. He hopes to finish it by fall. ***

Joe Provato returned from England after a visit with Fred Price who was staying at the home of his parents this summer. ***

Art Rabe had a successful cataract operation in July. ***

Bob Kirchgessner (professional photographer) is seeing stars, but they are in the eyes of the many couples whose weddings Bob has been photographing. ***

A pair of blue-jays built a nest in a tree near the Mayer's home and took an extreme dislike to the occupants of the house who were buzzed whenever they entered or left their home. The birds zoomed upon them no matter how carefully they planned their entrance and exit. The Mayer'S home, this summer, was "for the birds." ***

Edith Geiger

ON THE NEXT PAGE - B.A.A. PROFILE - ERNST BOTH

"Thank You"

A special "thank you" goes to Ernst E. Both for his many years of service as editor of the Spectrum. Through his efforts we could point with pride to a publication that was well organized, interesting, and filled with useful information.

For all Ernst is a very busy man, he managed, somehow, to find the time necessary to be the editor. Because he was the editor, there were many things concerning his activities that would never get by his desk to appear in "Spy and Tell." Therefore, members know little about this amazing man and the many things he does. I think a "Spy and Tell" on Ernst is due.

We all know that Mr. Both is a noted astronomer and Curator of Astronomy at the museum, but few realize that he teaches astronomy from time to time in our local colleges; gives lectures to groups in the area; provides information on astronomy and mycology for the local newspapers; writes for the museum publication; appears on television occasionally; reviews books for Sky and Telescope; and gives invited papers before various astronomical organizations, professional and amateur. His paper on the history of lunar cartography given before the International Union of Amateur Astronomers' annual meeting in Hamilton, Ontario (1976), is published in that organization's PROCEEDINGS.

Last year Mr. Both traveled to Lowell Observatory to procure valuable lunar maps, charts and photographs from the U.S. Air Force lunar mapping project. He had an opportunity to spend a week in research while there.

He is now extremely busy at the museum working on the astronomy exhibit. With all of the things in which Ernst is involved he finds time to help those who have an interest in astronomy.

Not only is Mr. Both the Curator of Astronomy at the museum, he is also the museum's mycologist. He is internationally known as a bolete (genus of mushroom) authority, and is one of the six top bolete specialists in the country. He recently co-authored an article in MYCOLOGIA with Dr. Rolf Singer, the distinguished mycologist of the Chicago Field Museum. The article is entitled, "A New Species of Gastroboletus and its Phylogenetic Significance."

Ernst teaches a class in mycology at the museum, and is in charge of the museum's Bolete Herbarium. He serves several area hospitals as a mycological consultant. On occasions he speaks to college mycology classes about boletes, and at times is a thesis advisor to graduate students in mycology.

Few members realize that Ernst is one of the finest musicologists in this area. He has a vast knowledge of music and musicians. Piano concertos are his greatest musical interest, and he takes great pride in his piano concerto recordings which number up into the hundreds. This is probably one of the most complete collections anywhere.

Mr. Both comes from a fine musical background. His paternal grandfather conducted a chorus and was a friend of Brahms. His maternal grandfather trained for the opera and appeared on the concert stage. One of his grandmothers was a fine pianist and piano teacher, who enjoyed performing the works of Chopin. His father, who was a biochemist and pharmacist, was a skilled violinist. His mother was also musical and played the piano. His brother, an excellent pianist, was, unfortunately, missing in action in World War II. Ernst has a sister in Syracuse who is also a pianist.

As a boy, Ernst studied violin for five or six years, and occasionally played in the musicales given in the Both home. He has been studying piano for the last few years and his teacher says that he is making remarkable progress.

How does Ernst relax after a hard day? He keys and studies mushrooms, practices piano when time permits, and then sits down to listen to piano concertos. At present he is deeply involved in studious listening to all of Mozart's piano concertos (27 concertos for piano and orchestra), so one can find him late in the evening with ear phones on his head and concerto scores in his hands as he listens and studies the great works.

Having a strong interest in a good education for young people, Mr. Both has served the North Collins schools as a member of the school board for a number of years and has just finished a term as president of the board. He continues to be on the board where he has been instrumental in solving many problems that school boards face.

Ernst is a devoted family man, and his home is a happy abode for his wife, Billie, and the children. He enjoys, along with the family,

the creatures that share his Sisson Highway address. You'll find a dog (Brandy, a Basenji), a cat, two boa constrictors (Slowpoke and Stubby), and a horse (Red), and any other creatures that stop by to become adopted.

Again, Ernst, thank you for the many hours spent on the Spectrum, for the excellence of the publication, for the leadership you have provided for the B.A.A. as a member, and for the years of service on the B.A.A. Board. We are indeed fortunate in having such an exceptionally fine human being among us.

E.L.G.

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METEOR NOTES

SAgittarid Meteor Shower

If anyone has been an avid meteor observer, he might have been as surprised as I was to see 17 meteors from this shower on the morning of July 2nd from 1:00 A.M. to 4:30 A.M. EDT. It was a comfortable evening for observing and it was certainly clear in the Tonawanda area. If I had been out in the country, like Beaver Meadow, I might have seen as many as 50 or 60 in the same time period. I do not observe too many showers due to the weather conditions, but when I do , I really enjoy the beauty that they produce. These meteors were white and crossed the sky from the constellation Sagittarius to well beyond the star Polaris.

I found that if I lay facing the eastern sky, about 80 degrees in altitude, my peripheral vision allowed me to see the start and finish of each meteor. No optical aid is required for these observations, just a good comfortable hammock or lounge chair and lots of patience. What is required is a star map, a piece of string, pad of paper, pencil with an eraser, a flashlight with a red covering, and if you wish, a fairly good tape recorder. All of this is for effectiveness and accuracy in recording what you see. Why not give it a try?

Darwin Christy

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METEOR SHOWERS FOR SEPTEMBER AND OCTOBER

On September 11, in the wee hours of the morning, one should look toward Perseus and the star Epsilon. From that point come some interesting meteors of about magnitude 4.5 in brightness. They are fast and show traces of a reddish hue. Their trajectory should exceed 100 degrees across the sky.

Eleven days later, on the 22nd, the Alpha Aurigids reach maximum. Not much has been seen of these, but it would be worth the effort to try to capture any on film or visually observe any of these 5th magnitude objects.

With a duration of only about six hours, the Quadrantids make their second yearly appearance. In January, this shower is one of the most spectacular, producing as many as 100 to 200 meteors in an hour's time. This October 2, only about 30 can be seen in an hour, the shower "debris" not fully intersecting the earth's orbit as it does in January. The average third-magnitude meteor in this shower is white and leaves a long, slow trail.

The waning gibbous moon will not affect the shower this year as it peaks before midnight.

On October 9th, the Giacobinids (Draconids) will present themselves. These are not to be confused with the June 28th Draconids and have a duration of only about two hours. This meteor swarm is highly variable from year to year and may show nothing at all. Yet, in 1933, there were as many as 20,000 counted in one hour, and in 1946, 1000 were seen blazing across the sky in an hour.

The Epsilon Arietids will make their appearance on October 17 at RA 2h 28m, Dec. +21 degrees.

Related to Halley's comet 1910 II is a prominent shower called the Orionids. As many as 20 should be seen in an hour. They are short and swift with an average magnitude of 4.2. Their duration is six days with maximum being on October 21st.

Another comet-related shower is the somewhat under-observed Leo Minorid display coming from the comet of 1739. An observer might see as many as 15 hourly, and there is a real need to gather more data for the record.

More meteor shower data will be printed in the next Spectrum for those interested in this fascinating aspect of observing.

GOOD LUCK!

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Darwin Christy

*** SKY TEST ***

The Edmund "Astroscan 2001"

Looking something like an inverted red mushroom, the Edmund "Astroscan 2001" is a 4¼-inch, F/4.5 rich field telescope with an integrated tube and mount assembly. Certainly, the unique shape of this ten-pound Newtonian will evoke more than its share of laughter from one's observing friends, but the 'scope's performance is impressive indeed.

With the 15 power Kellner eyepiece supplied, the RFT gives a 3½ degree field of view that is perfect for sweeping the Milky Way and perusing large-scale deep-sky objects. From Beaver Meadow, my Astroscan beautifully revealed the full extent of the Andromeda galaxy(M 31) on one particularly fine night. Only the lack of a field lens stop in the standard eyepiece really detracted from this inspiring view.

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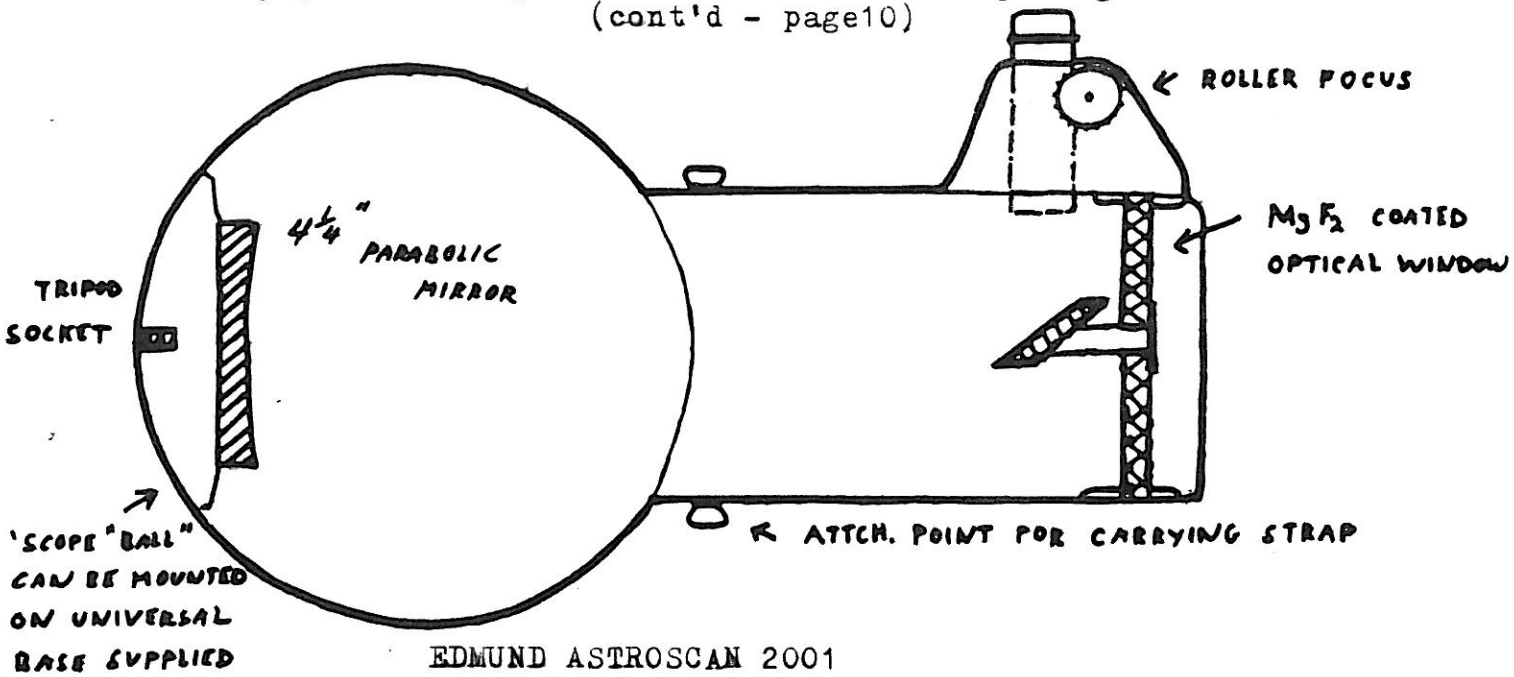

EDMUND ASTROSCAN 2001

SKY TEST (cont'd)

Utilizing other eyepieces, one may attempt higher magnifications, but the instrument can no longer be strap or hand held and becomes difficult to point. Lunar and star images are fairly sharp up to about 50 power, but the focus becomes increasingly critical and borders on the unsatisfactory. A magnification of about 85 power seems the absolute limit for this 'scope. Epsilon Lyrae is barely "notched" at that power, and the Cassini division in Saturn's rings is normally beyond reach. There is considerable image "flare" at these high powers.

This, however, is not to denigrate the performance of the Astroscan; used within its intended design limits, it is a distinct pleasure to use. It is well-made, rugged, and should give years of trouble-free service with its dust-free and permanently collimated optics. Its light weight makes it easily portable, and the aluminum base supplied is sturdy.

At 149.95 dollars, it seems a good value for the casual and deep-sky observer. The addition of a quality Erfle eyepiece would make it hard to beat.

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L.M.C.

REMINDER ****** DUES ARE DUE

NEXT * In the November/December Issue
- Orrin Christy's Marvelous Magical Mirror-Making Machine
- Sky Test - The Celestron 8

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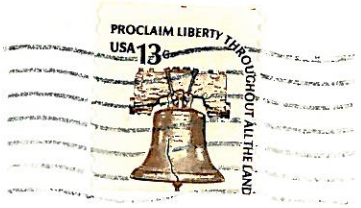

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