Education, Industry News

John A. Maurer recently resigned his positions as President of J. A. Maurer, Inc., and Precision Film Laboratories, Inc., to devote full time to independent research and development work, particularly in the field of 16mm motion pictures.

Harry W. Lange has been named executive vice-president and general manager of the Chicago studio operations of Kling Film Enterprises, Chicago. A veteran in production and quality control in filmmaking, Mr. Lange was 23 years with Sarra, Inc., Chicago, where he was general manager of the Chicago studio since 1952. He has produced motion pictures and slidefilms in all 48 of the United States. Mr. Lange's appointment fits into the recent streamlining of Kling's extensive operations which include three Chicago sound stages as well as the former Charlie Chaplin lot, comprising 26 buildings, in Hollywood.

Kling's Chicago studios now has as key staff: Jack Fenimore, executive producer; Hillard Rose, creative department; Manny Paull, art director; Lawrence Stein, comptroller; Dick Hertel, supervising editor; and Joe Bishop, studio floor manager.

Mr. Lange's Chicago experience began in 1924 when he joined the photographic studios of Fulton and Lawson. Subsequently, he was with Vocapix, one of the pioneer firms in business film production.

Recently, he has served as a director of SMPTE's Central Section. He is also active as a member of the American Society of Safety Engineers.

Harold C. Harsh has been named to the newly created position of Manager of Operations at Ansco. He was formerly Production Manager. In his new position, Mr. Harsh will be responsible for directing and coordinating the activities of Ansco's Camera Plant, Paper Plant, Film Plant, Warehousing and Industrial Engineering Departments.

Mr. Harsh studied at the College of Wooster, Wooster, Ohio, and at Ohio State University where he received an A.B. degree in 1931. He received a Master of Science degree in Physical Chemistry from the Massachusetts Institute of Technology in 1934 and thereupon became a production supervisor in Ansco's Paper Plant. From 1946 to 1949 he was manager of the Chemical Development Dept.

After World War II Mr. Harsh was sent to Germany at the request of the Department of Commerce to investigate progress in color photography there. He is a Fellow of this Society and a member of numerous scientific groups.

Gordon P. Mann has assumed the duties of Manager of Ansco's technical and laboratory services, according to an announcement by Robert M. Dunn, Assistant General Sales Manager of Ansco, photographic manufacturing division of General Aniline & Film Corp.

Mr. Mann, a graduate of Alfred University, joined the Ansco organization in 1937 and has held numerous executive positions. He was instrumental in formulating the Ansco Color Finisher Program, the foundation of the present huge independent color film and color print processing industry. He will now be responsible for the operation of all of Ansco's color processing laboratories, will work with a growing number of locally operated color processing laboratories in the United States and Canada, and will supervise operation of Ansco's Customer Service Dept.

The Motion Picture Industry Credit Group was chartered in April 1953 with 18 members. Today it numbers 34 of the leading motion-picture processors, equippers, suppliers and service and financial organizations in the metropolitan New York, Washington, D.C., and Chicago areas. Membership is open to any organization providing services, equipment, facilities or supplies to motion-picture and television film producers and distributors, networks and stations, sponsors, agencies and film libraries. Membership is subject to approval of the Group's Executive Committee. The Group holds regular monthly meetings at the Park Sheraton Hotel, New York, at which talks on subjects of interest to the members are given and general discussion and exchange of information take place. A Group program and further information may be obtained through Group Secretary W. W. McAdam, National Association of Credit Men, 229 Fourth Ave., New York 3.

Sound Course

The opening session of the new course for sound technicians sponsored by the Society through the Education Committee's Subcommittee on Sound Recording was held on February 9 at the University of Southern California. In the photograph above, taken at the session, are, left to right, Lorin Grignon, Chairman of the Subcommittee; Herbert Farmer of U.S.C.'s School of Cinema; Tom Carman, Business Agent, Sound Technicians Local 695; and Dr. John G. Frayne, SMPTE President.

Herb Farmer reports that over 80 students registered for the one-semester course in "Elements of Sound Recording." The instructor is Caril Shipman, who is in charge of all sound systems employed at Disneyland. The class is meeting Thursday evenings, February 9 through June 7 at the Cinema Building, 659 W. 35th St., Los Angeles, from 7:30 to 10:10 P.M. Registration fee is $60.

In the January *Journal*, which carried an announcement about the Sound Course on p. 62, the name of Ellis King, Associate Professor of Engineering at UCLA, was unfortunately omitted from the listing of the members of the Sound Recording Subcommittee. Dr. King has been very active in the formative work of the Subcommittee and was host to the group for its January meeting, which was held on the UCLA campus. After dinner, at which members of the Subcommittee were guests, he showed the group through the engineering laboratories at UCLA.

Other members of the Subcommittee, in addition to Lorin Grignon, the Chairman, are Herb Farmer, Tom Carman, Barney Freericks of Twentieth Century-Fox, Lloyd T. Goldsmith of Warner Bros., Fred R. Wilson of Samuel Goldwyn Studio, and William Stafford of M-G-M.—*D.C.*

Capital Film Laboratories, Inc., of Washington, D.C., announced the appointment in January of **Garland C. Misener** as Director of Laboratory Operations.

Mr. Misener comes to Capital from the Ansco Division of General Aniline & Film Co., Binghamton, N.Y., where he served from 1949 until the present as Manager of Professional Motion Picture Services. In his new capacity at Capital, Mr. Misener will supervise all laboratory operations for the company and oversee the planning and execution of an extensive expansion program of laboratory operations in the near future.

Prior to his latest position with Ansco in Binghamton, Mr. Misener was for four

years on Ansco's Hollywood staff. While in Hollywood, he assisted in the introduction of Ansco Color and won an Academy of Motion Picture Arts and Sciences Award for his contribution to the design of the color print scene-tester, now widely used in the motion-picture industry.

In his earlier experience, Mr. Misener served as Sound Engineer with Warner Brothers, and for five years was a physicist with the Eastman Kodak Research Laboratories. During World War II, he was in charge of sound recording at the Signal Corps Photographic Center, attaining the rank of Major.

Mr. Misener, a native of Lapeer, Mich., is a graduate of the University of Michigan in Engineering Physics, and has pursued an extensive program of graduate study, both at Michigan and at the University o Rochester Institute of Optics in the fields of optics and television engineering. He is a Fellow and Governor of this Society and a member of the Optical Society of America, the Photographic Society of America, the Academy of Television Arts and Sciences, the American Society of Cinematographers, the Armed Forces Communications Association, and Tau Beta Pi, honorary engineering society.

A National organization of industrial photographers, believed to be the first of its kind in the world, has been formed under the sponsorship of the Photographers' Association of America. Richard C. Kinstler, who heads the photographic division of Procter & Gamble Co., Cincinnati, Ohio, is chairman of the steering committee. Other committee members include: Roy Wolford, of Northrup Aircraft, Hawthorne, Calif.; Norman Germond, Chrysler Corp., Detroit; Peter Carey, Bendix Corp., Teaneck, N.J.; Morris Gordon, Western Electric Co., New York; and Ed Purrington, Ford Motor Co., Detroit.

The committee has formulated a specific program concentrating on nine major points. These include aiding the industrial photographer to do a better job for management through sharing the skills and techniques of hundreds of photographers throughout the country, the holding of periodic regional photo short courses; operating lecture and placement bureaus; conducting an annual photo exhibit and the annual National Industrial Photographic Conference in conjunction with the yearly PA of A convention; and providing illustrated taped lectures for groups in isolated areas.

Current effort of the group is planning the national Industrial Photographic Conference to be presented this year at the Conrad Hilton Hotel in Chicago, July 22–27. The nation's top men in the industrial photographic field will deliver talks and demonstrations on the latest techniques and current problems. The steering group also is collecting articles and materials of current interest to industrial photographers.

A membership drive aimed at professional photographers working in industry is underway. A brochure describing in detail benefits to be derived from membership in the new organization will be available shortly and will be distributed by the PA of A. These may be requested by individuals, groups or industries.

Patience and Latitude

While workers in profusion continue to cultivate aspect ratios — variously — and while others may serve more strenuously in the cult of standardization, the historical review reprinted below may show essentially where we have been and where we continue going.

Mr. Limbacher, author of this article reprinted from *Films in Review* of October 1955, is Audio-Visual Director of the Dearborn, Mich., Public Libraries where he handles all motion pictures and television. He writes articles like this one out of a love for the movies. We understand that his thesis for a Masters in Education at Indiana University was on the history of color film from hand-painted films to those in Color by DeLuxe. He is now working on a book manuscript, "Four Aspects of Film," from which the following has been abstracted.

Mr. Limbacher has noted that in the past ten years this *Journal* has been a considerable help to him. Readers who wish to augment the outline he has written will find their letters welcomed by the Editor.— *V.A.*

Widescreen Chronology

Widescreen Experimentation Is Almost as Old as the Movies Themselves

By JAMES L. LIMBACHER

IF THERE were to be a birthday party celebrating the advent of widescreen motion pictures, how many candles would be atop the cake? Two? Ten?

No, fifty-nine.

Like any new invention, motion-picture film was not at first standardized. William Friese-Greene's first movies were huge strips of celluloid; Pathé's film was 28 mm wide; the width of Biograph and Mutoscope's was 2.75 inches; and the Lumiere brothers' film had only one sprocket hole per frame. Thomas A. Edison made his movies on 35mm, with four perforations per frame near each edge of the film.

Chiefly because Edison sold more motion-picture equipment than anyone else, his film size and his screen size — four by three — became the worldwide standard. Also, we must remember that the early motion pictures were exhibited not in theaters but in stores, which were long and narrow. If movies had first been shown in theaters, the natural tendency would have been to make the image as wide as the theater stage.

The first widescreen process dates back to 1896 when Raoul Grimoin-Sanson presented Cineorama, which consisted of ten projectors throwing ten images on a huge circular screen. Cineorama was later shown at the Paris Exposition, along with a widescreen presentation by the Lumiere brothers on a screen 48 feet high and 53 feet wide.

Americans first saw widescreen movies in the travelogs of Lyman H. Howe, who shot his films with a short focal-length lens. The resulting pictures tended to envelop the audience and to induce an illusion of the audience being part of the action.

Professor J. Louis Peck of France demonstrated a huge curved screen at the New York Rivoli in 1920 with scenes from Paramount's *Everywoman*. The critics were excited about the good focus and "the absence of eyestrain."

In 1921 George W. Bingham exhibited a wide-angle projection system he called Widescope, consisting of two films projected side by side and giving a double-width image.

In the middle '20s the Germans introduced a 42mm film called Tri-Ergon, which had a premiere at the New York Cameo.

Lorenzo del Riccio launched his Magnascope process in 1925 and it had more longevity than any previous process. A special lens gradually "blew up" the film image to four times its regular size. The effect was spectacular and usually was reserved for the climax of the picture. The Magnascope lens was first used for the battle scenes in *The Big Parade*, and later in the climaxes of *Old Ironsides*, *North of '36*, *The Thundering Herd*, *Chang*, *Twinkletoes*, *The Iron Horse* and *Wings*. It experienced a 1948 revival in Selznick's *Portrait of Jenny*, and again in 1952 in his *The Wild Heart* (at the New York Paramount).

Natural Vision, promoted by the late George K. Spoor and P. John Berggren, used 70mm film and was projected on two screens so arranged one behind the other as to give a stereoscopic, widescreen effect. *The American*, starring Bessie Love and Charles Ray, was shown in Natural Vision. In 1929, sans stereoscopic effect, it reappeared as Fox's Grandeur process.

But for the arrival of sound, Grandeur might have become the new standard width for movies. However, theater owners were spending too much money wiring their theaters for sound, and could not afford to buy projectors that could handle 70mm film. After three Grandeur films, *Fox Movietone Follies of 1929*, *Happy Days* and *The Big Trail*, Grandeur disappeared. Twentieth Century-Fox repeatedly announced they would revive it in "roadshow" presentations.

Several other wide-film processes appeared simultaneously with the arrival of sound: Paramount's Magni-film (56mm film) was used for *You're in the Army Now* in 1929; MGM's Realife (65mm) for King Vidor's *Billy the Kid* in 1930; and Warner Brothers' 65mm-film for *Kismet* in 1930 and *The Lash* in 1931.

In France, Claude Autant-Lara and Abel Gance had introduced the "triptych screen" — three regular-sized screens, on the outer two of which were shown scenes supplementing the image in the middle. Autant-Lara used the process for *Pour Construire un Feu* (1925), and Gance for his monumental *Napoleon* (1927).

A more radical departure was the process developed in 1928 by George Hill and an Italian, Professor Alberini, recently reported in *Films in Review* (October 1954). Its basic difference was that the film was shot and projected horizontally. Although impractical then, the idea reappeared 25 years later as Glamorama, and even more recently as VistaVision.

After all these systems had run their course, Adolph Zukor of Paramount, speaking for the Producers Association of America, assured exhibitors they would be burdened with no more wide films. By mutual consent, the producers had called a halt.

But experimentation continued. At the

World's Fair in New York in 1939 the late Fred Waller presented Vitarama, which used 11 projectors strapped together to project an image on a curved screen surmounted by a quarter dome. Although Vitarama excited those who saw it, it was impractical for theatrical use. Or was it? Vitarama, without the dome, and with refinements, and only three projectors, emerged in 1952 as Cinerama!

The success of Cinerama, the reintroduction of 3-D, and the competition of tiny-screen TV, made widescreen images on one film the great desideratum. The answer was "anamorphosis," the principle of which was patented as early as 1862 and demonstrated as early as 1898. When Dr. Sidney Newcomer projected his "squeezed" films in 1930 the film industry was not interested. When Professor Henri Chrétien demonstrated a similar system a year later, Paramount optioned but did nothing with it. In 1937 Chrétien exhibited his anamorphic system at the Paris Exposition, but it was not until 1952 that Spyros Skouras of Twentieth Century-Fox took it up and renamed it CinemaScope.

CinemaScope's success is history, but it has not been, and is not, without its challengers. Other anamorphic systems include Warner-SuperScope, developed by Zeiss-Opton in Germany for Warners; Vistarama, developed by the Simpson Optical Company for Carl Dudley; Cinepanoramic, developed in France; CameraScope, the English version of Cinepanoramic; SuperScope, invented by the Tushinsky Brothers for RKO; Vidoscope, developed and sold by Walter Futter; and Delrama in England. All are compatible with CinemaScope and, with the exception of SuperScope, which has a 2:1 aspect ratio, are the same basic process as CinemaScope.

The Todd-AO process, using 65mm (or is it to be 70mm) film, will enter the widescreen race this year with a roadshowing of *Oklahoma*. VistaVision, using images photographed horizontally on double frames reduced optically to 35mm images, or, in large theaters, projected horizontally, was introduced late in 1954 in *White Christmas* by Paramount, which has completely converted to horizontal double-frame photography.

Other large film processes include MGM's Panavision (65mm), Twentieth Century-Fox's 56mm film, and Camerama. Other widescreen systems which should be mentioned for the record are Superama, Sonoptic, Plastorama, Polyvision, AMP-O-Vision, Photorama, Perfect Tone, Scenic Scope, Paravision and Metrovision.

National Theatres' Cine-Miracle process is similar to that of Cinerama in that it uses three films and three projectors. But the equipment is much more mobile and the merging lines are not in evidence.

Walt Disney's Circarama completes the cycle of widescreen processes. It consists of 11 images projected on a circular screen, and this, basically, is the Cineorama process of 1896.

It is possible but not likely that widescreen standardization will come in 1956. The contenders most likely to be victorious are CinemaScope and VistaVision. But wait — someone has just announced a 42mm film which has an aspect ratio of 3:1 — which is larger than even Cinerama's projection ratio. I wonder. . . .

A Sagacious Solution to the Standardization Situation

By JAMES P. CUNNINGHAM
Equipment Editor, *The Film Daily*

The wide-screen and multichannel sound techniques of recent origin are the product of a considerable investment in developmental research, and have in turn presented such a clear case for further investment in technical improvement that a second round of developmental research programs was immediately undertaken.

The extending of aspect ratios had demonstrated that in their then present state, lenses, film, screens, film processing methods, studio techniques of photography and sound recording and cameras and projectors were unable to meet the quality demands of discriminating moviegoers. It is assuring to recognize that engineering has successfully met this second challenge. Today every film producer has available any of several high-quality systems for photographing his picture. Also, he can take his choice of release-print types with assurance that full value will be realized in theater projection. Only one serious problem remains, and that is the complication presented by the multiple release-print standards in current use. Not all of these standards can be accommodated in every theater booth; yet the designers are to be complimented on the fact that there is none of the new systems that cannot be accommodated in any theater booth.

If we consider the initial phase as one of innovation, and the second as one of consolidation in which many and varied efforts were brought to fruition almost concurrently, we are then prepared to consider the phase which must next be entered as one of integration, a period in which the virtues of all present-day processes must be made available to everyone, but without stifling the type of creative engineering effort responsible for the gains of the past four years.

How then to provide a solution to this problem that will be accepted with equal satisfaction by those who recommend a return to a single standard, as well as by those who endorse the sensible philosophy of continued competitive development in several directions at once. One proposed solution which has on its side the forces of logic, if not necessarily of reason, is shown here on the opposite page. This unique solution, simple in concept, although complex in its realization, is aimed at providing a single equipment for the theater that would serve all projection purposes; in short, an all-purpose projector. There is little doubt but that such an approach could be made promptly to swing the film industry into a fourth and final, or compensation, phase of development. Compensation in the sense that the door would be opened to a real payoff for all trade interests, and final in the terminal sense.

It should be recognized at the outset that the term All-Purpose is a misnomer in its application to any mechanical contraption available for motion-picture presentation in theaters up to this date. Not that there has not been a need for such an equipment, loaded with every conceivable gimmick and gadget required to accommodate the countless methods, techniques, processes and media for advancing the art of projecting images on a theater screen.

The need for a truly all-purpose projector has been further intensified by the deep concern within the industry over the problem of standardization.

And so there appears, now, a truly all-purpose projector, a projector to out-purpose any other all-purpose projector, and at the same time to solve the problem of standardization.

The closest we have to an all-purpose projector today is the projector which merely accommodates standard 35mm and 65–70mm positives. The proposed all-purposer will take anything from 3 $\frac{6}{8}$mm to 178 $\frac{7}{8}$mm. If that doesn't please the one-standard people as well as the multiple-standard bearers, nothing will, nothing can.

And while great minds of projector technology have long been disturbed over projection standards, some other great minds have been equally disturbed over standards for the special equipment that they manufacture for theaters. We refer to the engineers and manufacturers of pizza-pie ovens, popcorn poppers and all of those other machines which have become so closely related to the art of motion-picture presentation. To give them a break, too, the all-purpose projector was designed to embrace the technological requirements of both acetate and hot dog, to perfection—at least.

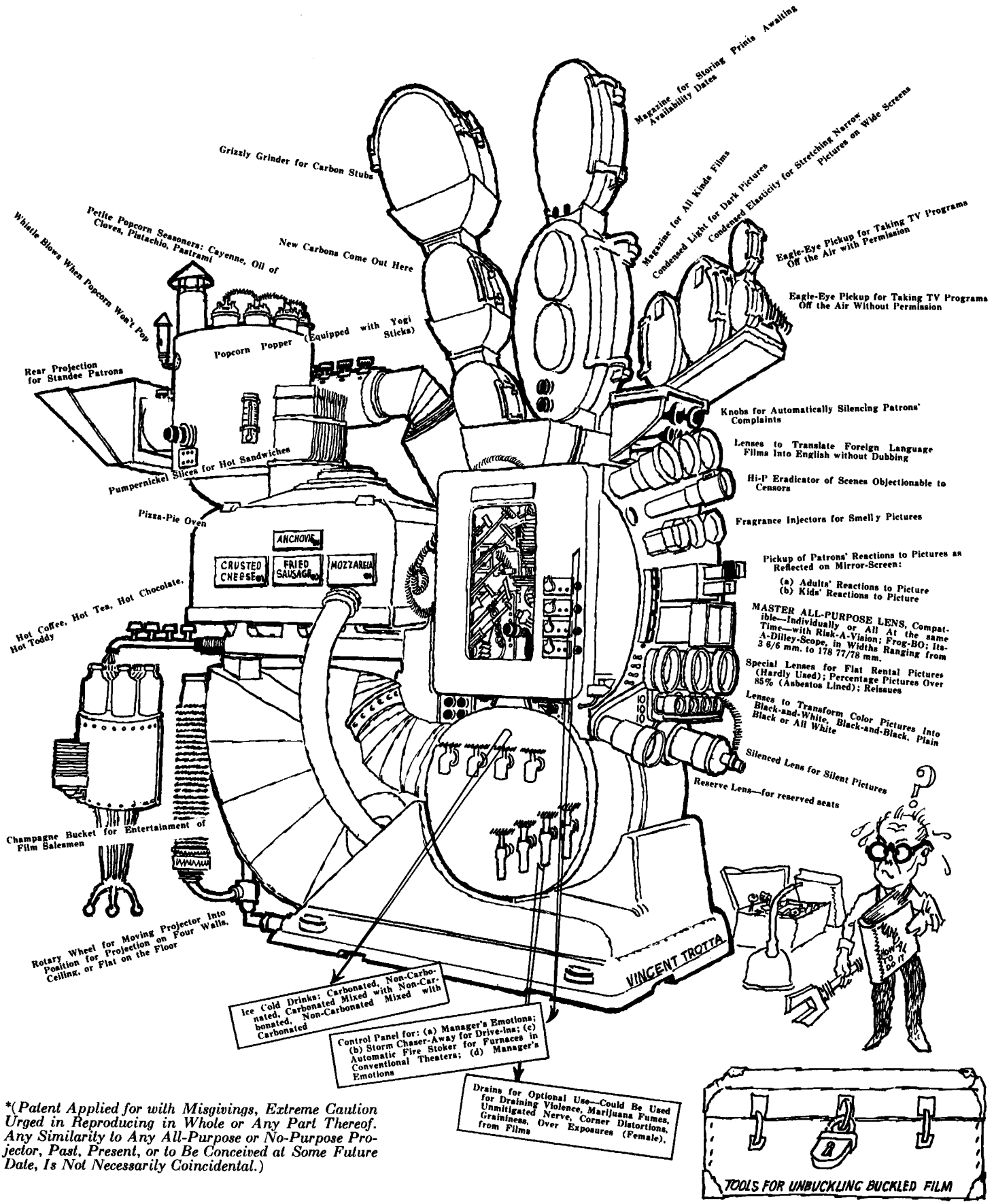
Any criticism of the structure of the all-purpose projector by those belittlers who might think they see in its lines a hint of Rube Goldberg, should take into account the compactness of the projector. Not a single pulley, ceiling wire or foot pedal was used in the design. The proposed projector operates on the principle of a flick of a switch—and there are hundreds of switches, requiring hundreds of flicks.

A rapid examination of the all-purpose design is not recommended; but if the reader insists, he probably will not notice in his haste what may appear to the more meticulous minded to be serious omissions in construction. Such omissions, however, do not exist, although the designer has seen fit to leave certain less fundamental components unmarked.

Much recognition of late has been given to the challenging aspects of this solution to an equally challenging problem. Yet thanks must also be given to those engineers whose years of serious effort dedicated to advancing the technical aspects of the motion-picture art have in some measure, we admit, served as an inspiration and a guide, without which this project could not have achieved such rapid and faultless completion.

A TRULY ALL-PURPOSE PROJECTOR*

FROM A BRAINSTORM BY JAMES P. CUNNINGHAM, *New Equipment Thinker-Upper*



*(*Patent Applied for with Misgivings, Extreme Caution Urged in Reproducing in Whole or Any Part Thereof. Any Similarity to Any All-Purpose or No-Purpose Projector, Past, Present, or to Be Conceived at Some Future Date, Is Not Necessarily Coincidental.)*