

**HOLLYWOOD
& LOS ANGELES
THEATRES 1917-31**

**Part Three: THE WEATHER VEIN
Carrier Engineering Corporation**

Motion Picture Number August 1921

**Motion Picture Exhibitor Vol. 3, No. 4, 1923
Featuring Grauman's Metropolitan Theatre, Los Angeles**

**The complete original documents are held in the
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The Weather Vein

AUGUST
1921

The Business of the
Carrier Engineering Corporation
involves the application of the
scientific principles of
AIR CONDITIONING
to the Practical Requirements of
INDUSTRY



Humidification Dehumidification
Evaporative Cooling
Air Cooling by Refrigeration
Heating Ventilation
and
DRYING

At Low Temperatures and Low Humidities
At Medium Temperatures and High or Low Humidities
At High Temperatures, from 200° to 1000° F.

THE PIPING DIVISION
offers a complete service for the design and
installation of Power and Process
Piping of all Kinds

We Invite Correspondence

The Weather Vein

for August, 1921

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Please note that the address of our New Plant is 750
Frelinghuysen Avenue, Newark, N. J., to which all mail
should be addressed. The New York Sales Engineering
Offices will remain at 39 Cortlandt Street.



Motion Picture Number

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SEPTEMBER WILL BE THE
CERAMICS NUMBER

The Weather Vein →

A MAN'S PRAYER

FEACH me that 60 minutes make an hour, 16 ounces one pound, and 100 cents one dollar. Help me so to live that I can lie down at night with a clear conscience, without a gun under my pillow and unhaunted by the faces of those to whom I have brought pain. Grant that I may earn my meal ticket on the square, and that in earning it I may do unto others as I would have them do unto me. Deafen me to the jingle of tainted money and to the rustle of unholy skirts. Blind me to the faults of the other fellow, but reveal to me my own. Guide me so that each night when I look across the dinner table at my wife who has been a blessing to me, I will have nothing to conceal. Keep me young enough to laugh with little children, and sympathetic enough to be considerate of old age. And when comes the day of darkened shades and the smell of flowers, the tread of soft footsteps and the crunching of wheels in the yard—make the ceremony short and the epitaph simple—**"HERE LIES A MAN."**—*Produce Journal.*



Oh! To have my past all ahead of me.



Gaiety brings laughter to the lips of the happy and tears to the eyes of the sad.



Marry in haste and repent at Reno.

"Every day a good day" →

The Weather Vein →

ADVENTURES OF

The Mechanical Weather Man

THE FILM MYSTERY



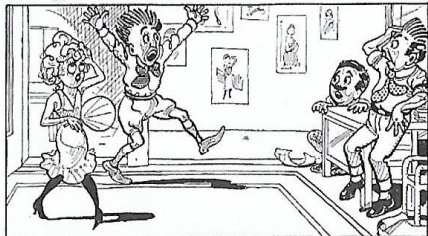
Film-em Brothers, movie-makers, register dismay.
A dozen cancelled contracts is the total for the day.



"Look here!" A wrathful Lab man's voice makes
Film-em Brothers quake—
"The piece of film I'm holding here is cloudy and
opaque!"



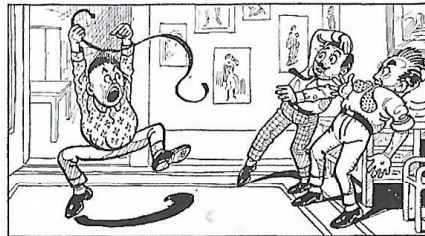
"And look at this!" The camera-man exudes an irate yell—
 "The film I gotta use is scratched and full of dust as well!"



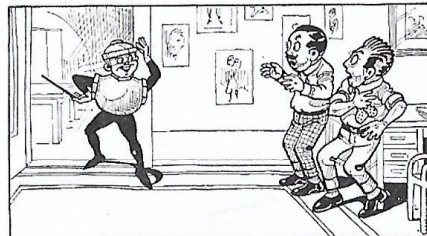
"And how in blazes can we work"—a crazed director cries,
 "In ninety-six degrees of heat, with dust clouds in our eyes?"



"What's more, developing's a crime in weather like today!
 The coating softens on the film, gets smudged, and 'pulls away.'"



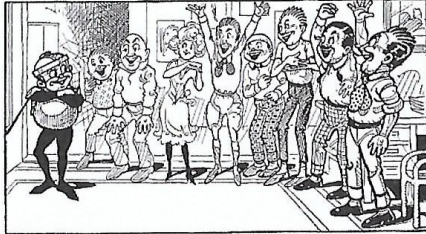
"Zounds!" In bursts Sam, the dry-room man, and starts to rave and cuss—
 "Conditioned Films, across the way, dry twice as fast as us!"



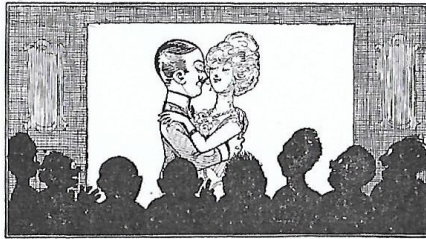
Then just as all seems inky gloom, there comes a ray of cheer,
 (It's Mech—the grinning little scamp!) "What ho, my friends, I'm here!"



"Zing! Zip! No more close-ups today of trouble and despair—
 We'll try instead a second reel called "Clean Conditioned Air!"



Then like a flash through all the plant there runs the joyful news, That Mech, the weather wonder-man, has killed the movie blues!



And since that day when Film-em's films are shown upon the screen, The movie fans declare the show the best they've ever seen.



So Film-em Brothers smile with glee—as well the brothers may— When contracts by the carload flood their office every day.

In a Lighter vein

Fair or Fowl

THE floorwalker approached the very much perturbed looking young man just inside the entrance of the department store.

"You look as though you wished some sort of information, sir. Can I be of service?"

"I don't know," said the perspiring young man. I was told to go in here and purchase either a camisole or a casserole, and for the life of me I can't remember which."

"Well," said the floorwalker patiently, "if you'll tell me what kind of a chicken you propose to put in it, perhaps I can help you."



Pointed

One of our friends remarks that the latest styles in women's dresses remind him of a barbed wire fence, which adequately protects the property without obstructing the view.

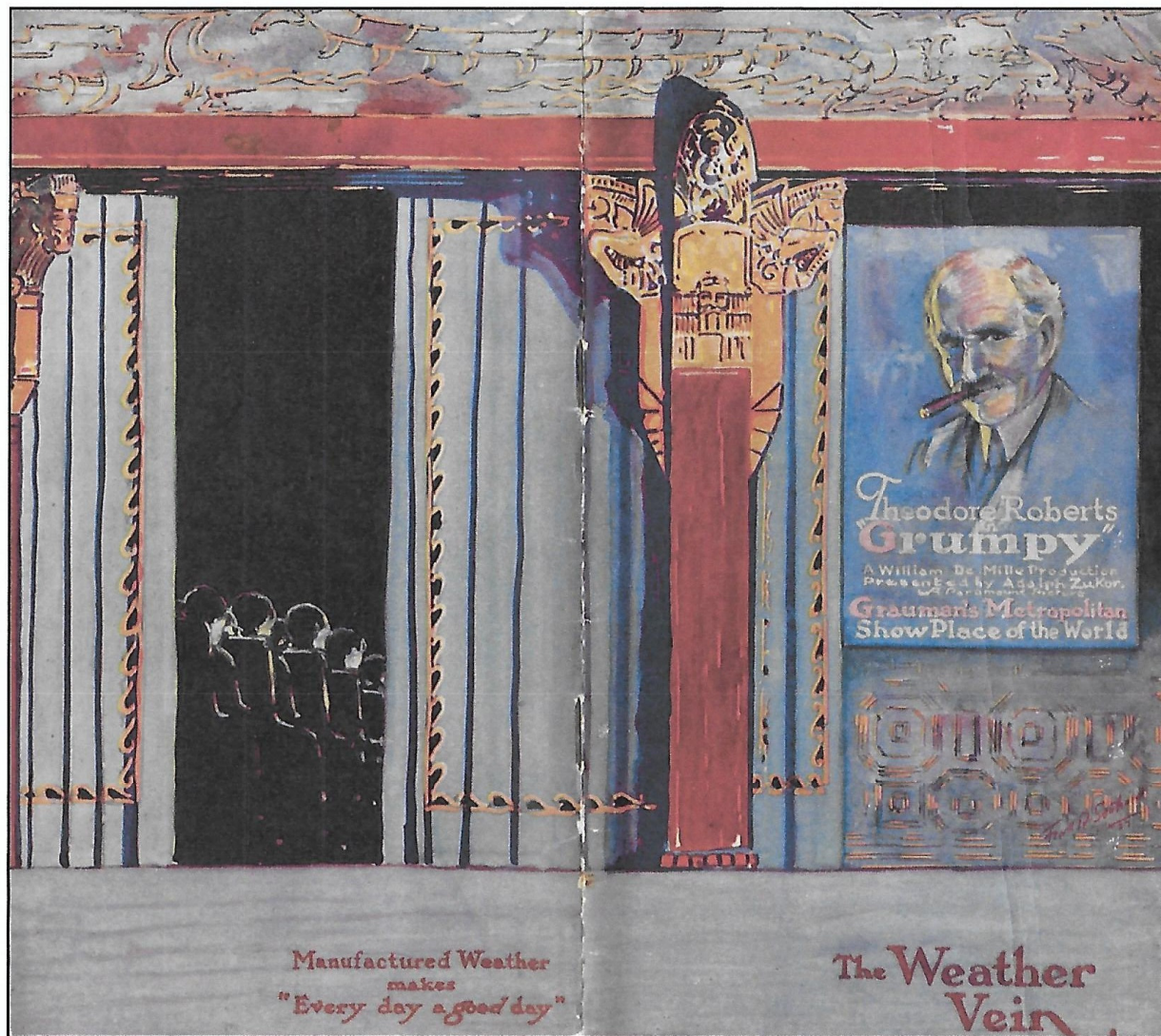


Last month a coal dealer wrote us as follows:

"Owing to the small demand for coal recently, due to the mild winter, there is very little mined, and an extreme shortage is anticipated this coming winter. Prices will be higher each month, beginning May 1st."

How do they do it?

"Every day a good day"



Manufactured Weather
makes
"Every day a good day"

The Weather
Vein

This Number
will prove
Especially Interesting
to the
Motion Picture Exhibitor
and to
Every Movie Fan

Cover reproduced from Original Painting
by Frank R. Southard
depicting an impression of
GRAUMAN'S METROPOLITAN THEATRE

The Weather Vein



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Edited by Esten Bolling

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There's a way to make

"Every day a good day"

Each issue of The Weather Vein
is a guide-post on the way

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please write your name and title plainly

The Weather Vein



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WEATHER being a subject of general and absorbing interest, this little book is dedicated to the dissemination of knowledge concerning weather—and the fact that weather can be manufactured.

Mr. Motion Picture Exhibitor

MR. SID GRAUMAN has builded in Los Angeles, a great Theatre which marks the dawn of a New Day in Motion Picture Showmanship. We want to tell you of this Theatre and of the part our own Manufactured Weather has been privileged to play, in its success. Therefore, let us present ourselves to you—because we are destined to become more and more important to you as the New Day advances.

We are an organization of trained Engineers who have specialized for nearly 20 years in the development and installation of mechanical equipment which manufactures weather for the interior of buildings, so that we can make "Every day a good day" within such buildings, regardless of the weather which prevails outside.

Until very recently our activities have been confined principally to industrial projects because Manufactured Weather (as we speak of Scientific Air Conditioning) has proved so remarkably effective in more than a hundred different Industries—all the way from chocolates to motion picture film—that Industry has commanded practically all of our capacity.

"Every day a good day"

Mr. Sid Grauman, Builder of the first scientifically conditioned Theatre in the World, believes not only in providing his Patrons with Manufactured Weather to insure their Comfort and Health, but, also, in providing the Picture with what he calls an "Atmospheric Prologue" to insure its Presentation under the most favorable circumstances.

Therefore when Mr. Grauman presented The Covered Wagon he brought these Indians to Hollywood to lend a real Atmosphere to his Prologue. The Indian at the right of the four Persons facing the Camera is the only survivor of those who participated in the Custer

Massacre.
Mr. Sid Grauman, wearing the Cap, is the figure to the left of this Indian.



Photograph by J. C. Milligan

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The Weather Vein

Thus we have dealt more with problems involving the maintenance of air conditions (temperature, Relative Humidity, Purity, Distribution) suitable to the varying characteristics of materials, than with problems wherein the comfort and health of the human being are the paramount considerations.

Not entirely so, however, because many industrial applications contemplate the efficiency (i. e. comfort and health) of the worker, a factor as important as the mechanical efficiency of the manufacturing equipment.

Thus in Textiles, one of the Industries which we have served widely for many years, Manufactured Weather is considered substantially essential to a modern mill of any appreciable size, not only because Manufactured Weather insures maximum manufacturing efficiency by keeping the fibres always in the most favorable condition (i. e. just moist and warm enough to be soft, pliable and strong), but because it also assures maximum *human* efficiency by protecting the health and comfort of the operatives. Indeed, in the modern Textile Mill of today, Manufactured Weather to insure cool, comfortable working conditions during the summer months and moist, not too warm conditions during the winter months, is considered essential to profitable operation, because it practically eliminates the labor problem, reducing the turnover, minimizing absenteeism due to illness, and obviating the discontent which is the foundation of many labor difficulties.

"Every day a good day"

[5]



Photograph by Albert J. Kopeck

A glimpse of the Mezzanine Foyer, Grauman's Metropolitan Theatre, Los Angeles, which affords a partial Conception of the consummate artistic Skill with which the Architect-Artist, Mr. William Lee Woollett, has conceived the Interior. Mr. Woollett is one of America's foremost Theatre Architects and Grauman's Metropolitan is without question his Masterpiece.

The Motif which Mr. Woollett used is so Unique that the Beauty of his Work baffles description. The Color Harmony is in itself remarkable and the Decorative Designs and Figures were created and executed especially for this Theatre.

It is more than worth a trip to Los Angeles to see this magnificent Theatre—a fitting tribute to the Art of the Motion Picture.

Over the Doorway may be seen the exquisitely wrought Grilles which cover the Supply Openings—a part of the Manufactured Weather Equipment.

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The Weather Vein

The New Era

Manufactured Weather in the Motion Picture Theatre

TODAY we are entering upon a new era—the application of Manufactured Weather to the finer public buildings, especially the Motion Picture Theatre, where the comfort and health of the human being are the major considerations—altho, on the other side of the fence, there is, as always, the practical consideration of money—expenditure and return.

If we pursue the instance of the Motion Picture Theatre, with which this writing is chiefly concerned, we have a splendid example from both angles. From the Public's point of view Manufactured Weather is desirable because it means health and comfort, especially in the summer, tho no less in the winter. From the Exhibitor's viewpoint Manufactured Weather means a tremendously profitable investment of dollars which will yield a handsome return because the Box Office quickly reflects the pleasure and satisfaction of the patrons whose health and comfort are *always* protected by Manufactured Weather.

In a way it is fortunate, Mr. Exhibitor, that we have had most of our developmental experience under the rigorous requirements imposed by Industry because this has afforded us a remarkably broad opportunity to meet the many varying factors which are involved in scientific air conditioning and has enabled us to study our science

"Every day a good day"

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Photograph by Albert J. Kopec

A Corner of the Main Foyer, the Entrance to Aisle One. Mr. Southard has endeavored to give some slight conception of the Coloring in his Cover Painting for this Number of The Weather Vein. Our Chief Engineer, Mr. Logan Lewis, went to Los Angeles, to study the Engineering of our installation in the Grauman Metropolitan and when we asked him to describe to Mr. Southard the Coloring in this Corner, he said, "It can't be described. It must be seen."

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Unfortunately Mr. Southard did not have an opportunity to visit the Theatre personally and his Painting must therefore be presented as an "Impression" which is merely suggestive of Mr. Woollett's charming Work.

The Weather Vein →

In a way, both our prophesies have been fulfilled. The Summer Chumps are becoming too few to save the Summer Slumps and the Exhibitor is beginning to feel the pressure of public opinion. And Mr. Sid Grauman, the Exhibitor with prevision, has arisen.

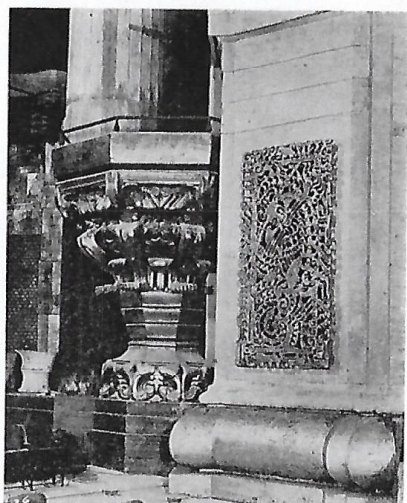
But before Mr. Grauman there was that phase of development when the Exhibitor tried to "get by" with make-shifts and, in some cases, with outright subterfuges. We insist upon impressing this fact because we want you to see the situation clearly and we want to make sure that you do not confuse Manufactured Weather with any of the devices which have been employed during that era *between* the Nickelodeon Period, when the public would go to see the new and novel movies under *any* conditions, and this New Day when the Motion Picture has risen to great heights as an Art worthy of the most able showmanship.



→ *"Every day a good day"* →

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The Weather Vein →



Photograph by Albert J. Kopec

One of the great Columns of the Proscenium Arch, showing one of the Air Grilles and one of the beautifully executed Exedrae.

When this photograph was made some of the seats had not been installed and in this Area may be seen some of the Mushroom Ventilators thru which the Air is exhausted.

→ *"Every day a good day"* →

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The Weather Vein →

The In-Between Period
in Motion Picture Showmanship

DURING that In-Between Period many attempts were made to "get by" with cheap and inadequate makeshifts. The Exhibitor still believed that he could fool the public.

There was a period when carloads of propeller-type fans were installed in movie houses of all sizes and descriptions. Practically, these fans did nothing except partly relieve the foul and heated air of the theatres by drawing in the dirty and nearly as hot, or hotter, air from the outside. Psychologically, however, these fans, *for a while*, worked very well. They fooled the public because the public is easy, very easy, to fool, *for a while*. These fans fooled people because they were very cleverly installed. They were arranged to exhaust from the roof-line and the principal opening provided for the incoming outdoor air was thru the comparatively narrow entrance-way. Thus there was set up in this entrance-way quite a regular man's-size draft which deluded the poor patrons into believing the theatre very well "ventilated" indeed. We have seen such entrance-ways in which the draft would well-nigh lift your hat, bedad—and, yet, inside, the temperature would range well up into the nineties and the air would be humid and foul past believing!

This subterfuge worked only for a very short while—tho there are many theatres still going thru this phase of the In-Between Period.

→ *"Every day a good day"* →

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The Weather Vein →

The Optical-Delusion Phase

FOLLOWING this phase came the Optical-Delusion Phase, wherein the theatre owner put Klondike fronts on his theatre, the fake icicles and marble-dust snow so obviously a sham that it is a wonder they ever "got by" with it at all. During this phase they also put ferns and flowers about the lobby, kept the lights very dim, and put on their seats and lounges (if any) light-colored "cool-looking" slip-covers.

The Optical-Delusion Phase is still working. It is actually being advocated now as one means of combating the Summer Slump by fooling the Summer Chump.

But it isn't working very well.

So some theatre-owners have grudgingly taken the next step.

The Make-Shift Phase

THEY have installed "cooling systems" employing mechanical refrigeration with a fan system which pulls the air thru "bunker-coils," as they are known. A bunker-coil is a mass of pipe thru which the refrigerant is passed, the air to be cooled being passed thru the coils, outside the pipes. This system, for the cooling of air is antiquated, dangerous to health (because the frosted surfaces of the pipes between which the air is drawn,

→ *"Every day a good day"* →

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The Weather Vein →

catch dirt and germs like fly-paper catches flies, but unlike fly-paper, these surfaces melt and release their accumulated filth directly into the air stream), and so inefficient that it is difficult to conceive why any engineer would recommend its installation.

In the two installations with which we are familiar, where bunker-coils are used, the air is introduced into plenums beneath the seats and supplied to the theatre thru the floor by means of a multiplicity of small hooded ventilators, known as "mushrooms."

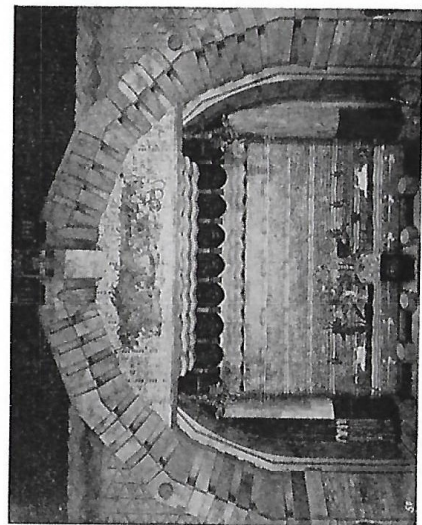
This up-draft bunker-coil system is lots cheaper than Manufactured Weather—but it has proved a sad disappointment to the theatre-owner and to the public—altho the Publicity Agents are still using square yards of newsprint to exploit it.

To begin with, the up-draft system is wrong not only in practice but in theory. It is obviously illogical to blow against the floor and the feet of the occupants air which a few seconds later passes upwards over the face—the nostrils, mouth and eyes.

It is unpleasant, if not positively revolting, to contemplate what is happening to one while one is sitting in a seat over an up-draft mushroom. It is common knowledge that the dirtiest part of any room is the floor. Here lies the dust and filth of the street brought in on countless shoes. *Think where these shoes have trod.* Here also falls all the refuse commonly found in the theatre.

→ *"Every day a good day"* →

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Photograph by Albert J. Kopec

The Proscenium. We regret exceedingly that in the reduction of this Photograph, made before the work was entirely completed, most of the Detail of the Decoration was lost, so that this Plate gives only a vague Idea of this splendid Setting. The Proscenium Arch itself is 72 feet high, the Radius of its Curve being 34 ft. The Stage is 55 feet wide and 42 feet deep.

In the lower center of this Picture may be seen the Organ Console, in position for an Organ Solo. The Console is mounted on an Elevator Platform, so that it can be raised or lowered nine feet. Thus the Organist and the Console can be lowered below the line of Vision while the Picture is being projected. This is a unique and thoughtful feature of Mr. Grauman's remarkable Theatre.

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The Weather Vein →

The air you breathe is discharged directly into the midst of this dirt and refuse, rising within a few seconds to enter your nostrils.

Yet nearly every mushroom-equipped theatre has the up-draft system!

Besides this consideration the up-draft system is a dismal failure as a "cooling" means in the summer.

We have investigated a number of much-advertised theatres having bunker-coil refrigeration and the up-draft system of distribution. The things we found are so unbelievable as to appear positively ridiculous.

We first noticed that the people who attended these supposedly "cooled" and "ventilated" theatres, would wait for many minutes to obtain a seat downstairs, the balcony being "hot and stuffy."

We then observed that the people sitting in the orchestra floor would either wrap a newspaper or a cloak about their feet or actually sit upon them, tailor-fashion!

This because the cold air admitted at the floor line would chill their feet enough to make them miserably uncomfortable.

Then we found that the engineers in charge of these theatres actually had to stop the apparatus during most of the time, because of the discomfort described above. In order, however, to go on fooling the public they operated their system by what has been aptly called "The Puff Method."

→ *"Every day a good day"* →

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The Weather Vein →

Thus the up-draft system is a cumbersome, inefficient, impractical and expensive means for partly dehumidifying the air, but it fails as a cooling system because the cooled air must be *heated again* before it can be blown upon the feet of the occupants.

How can they do it?

The Engineer of one of these theatres told our Investigator that he couldn't cool at all because he "froze everybody's feet" and that he couldn't dehumidify very much because the capacity of his *heating boilers* was limited and the management couldn't understand why he burned so much coal during the summer!

We won't blame you if you don't believe this—but it is the unvarnished truth and we hope, in your own interests, that it points a moral to you.

The moral that "Makeshift and cheapness lead only to dissatisfaction and expense."

Trained, experienced engineering services and proved scientific equipment cost more money—*in the beginning.*

But let us look at the results.



→ *"Every day a good day"* →

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Grauman's Metropolitan

The First Scientifically Conditioned Theatre in the World

THE conditioning—heating, cooling, ventilating—of the modern Motion Picture Theatre is a technical problem requiring for its proper solution, a long and broad experience.

In our twenty years of experience we have never encountered any air conditioning problem more complicated, or involving more painstaking care and engineering knowledge than the Motion Picture Theatre.

The very nature of the building—its size, as a single enclosure; its great cantilever balcony overhanging the main floor; the tall opening of the proscenium; the fact that it is occupied for twelve hours every day,—renders the design of adequate air conditioning equipment extremely difficult.

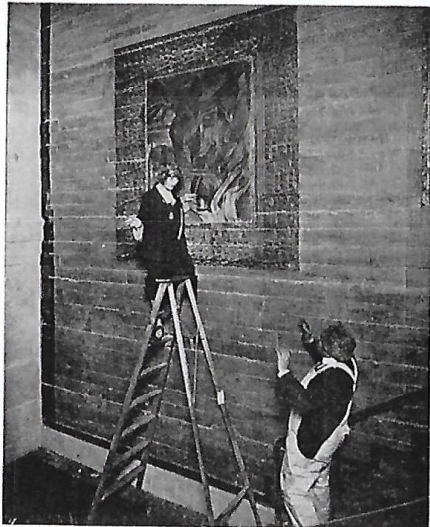
The heat from myriads of lights must be counterbalanced and removed in summer, *utilized* in winter.

The apparatus itself must be placed in difficult places, so that it will not interfere with the design and decoration of the building, or occupy valuable space. And the greatest care must be used to make the entire system noiseless.

→ *"Every day a good day"* →

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The Weather Vein



Photograph by Albert J. Kopeck

Miss Betty Compson doing some Interior Decorating. As far as we know Miss Compson does not pretend to be an Artist with the Brushes and Pigments, but we contend that she nevertheless is a great Interior Decorator—and we think this Picture proves it!

“Every day a good day”

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The Weather Vein

Then, most important of all, the system must be designed to afford uniform temperature and Relative Humidity, and uniform ventilation, without the slightest perceptible draft anywhere in the vast enclosure. This constituted, in the case of the Grauman Metropolitan Theatre, a problem requiring the combined engineering efforts of our entire staff—men who have specialized in scientific air conditioning practically all of their business lives.

And, *of course*, the problem was solved by the use of

The Carrier Downward-Diffusion System

In this System the air is introduced overhead and diffuses downward, being exhausted thru the floor by means of the same kind of mushrooms used in the up-draft system.

The air at the breathing zone is therefore pure, clean and sweet, having been thoroly washed in the conditioning machines, and having reached the breathing zone without contamination by contact with any part of the floor or any *other* part of the breathing zone.

What a contrast to the up-draft system?

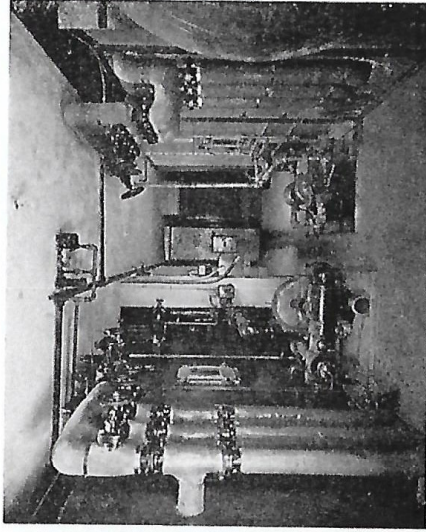
“Every day a good day”

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One of the Apparatus Rooms housing part of the Carrier Equipment which Manufactures Weather for Grauman's Metropolitan.

The Theatre is a striking example of Mr. Bergstrom's engineering ability. The Theatre itself is enclosed within a 12-Story Office Building (6 Stories not yet built) and Mr. Bergstrom has so ably designed the Building that the Office Portion has every Advantage of Daylight and Natural Ventilation, two factors not involved in the Design of the Theatre.

It was Mr. Bergstrom who inspired the Installation of Manufactured Weather, making Grauman's Metropolitan the first scientifically conditioned Theatre in the World.



Photograph by Albert J. Kopeck

The Weather Vein

Summer Conditioning

THE Downward-Diffusion System affords absolutely uniform cooling and conditioning during the summer, *all of the air in contact with the occupants being at substantially the same temperature and Relative Humidity.*

An analysis of the operation of the Downward-Diffusion System, with regard to temperature control, is very interesting.

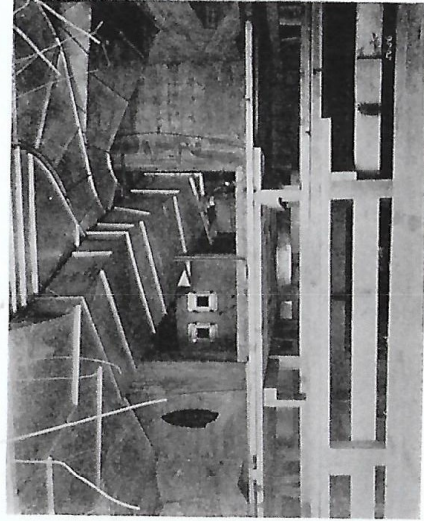
Heated air, as you know, ascends. The greatest source of heat is, of course, the audience itself, each group of fifty human beings radiating constantly a quantity of heat about equivalent to that emitted by the steam radiator in the average living room of a residence. Thus the plane of highest temperature in the theatre is immediately above the heads of the audience.

The Downward-Diffusion System meets every theoretical and practical requirement of the problem.

The cooling air must, of course, be admitted to the theatre at a temperature much *lower* than the temperature it is desired to maintain in the occupants' zone, so that this air, as it absorbs the heat from the occupants, the lights and all other sources, will *be heated* to the temperature it is desired to maintain.

The cooling air enters overhead and quickly absorbs the heat from most of the lights, which are also overhead.

"Every day a good day"



Another Apparatus Room showing some of the extraordinary Sheet Metal Work which is necessary to meet the Conditions encountered in Theatre Installations.

The Design and Installation of the Sheet Metal Ducts alone, constituted an Engineering Problem of great magnitude.

The Installation of the Grauman Equipment was supervised by our Mr. J. H. Bailey, Engineer, and our Mr. L. H. Poldermans, Construction, and to them is due, in large measure, the signal Success of the Carrier Equipment.

We acknowledge, with a pardonable Pride, our Appreciation of their Work.

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The Weather Vein

The slightly warmer, but still cool air then diffuses softly and evenly downward, being forced to do this by the new air continuously being supplied, until it meets the hottest plane, directly above the heads of the audience. Mingling with this hottest air the temperature of the downward stream is at once brought up to that desired and moves on downward to the mushroom exhaust openings at the floor. Thus the occupants of the seats are never subjected to *cold* air, but are always surrounded by cool air at precisely the temperature desired, *and this temperature does not vary* no matter how much it may be necessary to vary the temperature of the *entering* air, from the duct system, in order to meet the changing conditions within the theatre.

Thus the Carrier Downward-Diffusion System affords perfect cooling during the summer and permits the removal, in the dehumidifier, of sufficient moisture to make the air not only healthful but comfortable and invigorating.

What is more important, the Downward-Diffusion System accomplishes its results without drafts and with perfect uniformity, thruout the entire house.

Every Exhibitor will know the necessity of avoiding drafts and he will also know the desirability of making his balcony as comfortable as his lower floor.

With the Downward-Diffusion System the Balcony *is* as comfortable and well-conditioned as the lower floor.

"Every day a good day"

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The Weather Vein →

Another contrast to the up-draft method. In the theatres having the up-draft system, which we have visited, the Balcony has always been hotter and "stuffer" than the lower floor and usually there has been a line of people waiting for seats downstairs, or *turning away*, because they are unwilling to submit to the conditions in the Balcony!

Speaking of drafts—in the Carrier-conditioned Grauman Theatre there is no perceptible draft anywhere in the house, altho the air is admitted cold enough to hold the temperature in the early seventies even on a 98° day and in such quantity that the Theatre is always "fresh and sweet."

With regard to drafts the Carrier Downward-Diffusion System has another great advantage. There are no exhaust openings at the ceiling. Thus the theatre cannot, when the doors are opened, act as a huge stack, creating annoying inward drafts across the backs of those occupying the seats nearest those doors. This "stack effect" is unavoidable with the up-draft system and will occur even with the downdraft system unless the installation is very carefully engineered.

In Grauman's Metropolitan there is no draft from the doors at any time, no matter what the conditions may be.

In several of the big theatres on Broadway (New York City) they've had to erect windshields across the entire width of the theatre in order to minimize the drafts from the stack-effect!

→ *"Every day a good day"* →

The Weather Vein →

And from personal experience we can declare that the windshield is notably ineffective. We've had to wear our muffler on several occasions!

In one theatre that we know of the Orchestra refuses to play unless the "ventilating" apparatus is shut down, so that they won't be subjected to the drafts!

Winter Conditioning



E'VE heard it said that "the Downward-Diffusion System is all right for cooling but for that very reason it's all wrong for heating because heated air naturally ascends and should be introduced at the floor level."

The argument is wrong because the best way to heat is from overhead, and that can be clearly demonstrated, but the important fact is that the "heating" of a Motion Picture Theatre in winter is really *cooling*, precisely as in summer, except that the cold air from outdoors can be washed and used instead of operating the refrigerating machines.

It comes about in this way. The animal heat from the audience, and the heat from the lights, is sufficient to *overheat* the theatre even on the coldest winter day, when the theatre is scientifically equipped to prevent "stack effect" drafts

Thus in the scientifically conditioned theatre no steam heat whatever is used during the show

→ *"Every day a good day"* →

The Weather Vein →

hours, the temperature being automatically controlled by the admission of sufficient outdoor air to *cool* the theatre to the desired temperature.

In the Grauman Metropolitan during the winter, steam is used for one hour only before the theatre is opened at 11 a. m. and for one hour only before the theatre is closed at 11 p. m., during which hour the audience is, of course, beginning to thin out.

This is in sharp contrast to the other system which, as pointed out, requires steam during the hottest summer weather!

The difference lies, of course, in *engineering*, because it is engineering which makes raw materials useful. You can buy the raw materials, even the fabricated machinery and duct work incident to an air conditioning installation—but if you fail to buy, *also*, the best engineering obtainable you cannot expect the results you want. Can you?

The greatest masterpiece of the last Century and the most uninspired daub may well have been painted with the same paints on canvas cut from the same bolt. The difference *in the result* lay in the mind and hand that *engineered the job*.

→ *"Every day a good day"* →

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The Weather Vein →

Automatic Control

WHETHER summer or winter, here or there, the theatre equipped with Manufactured Weather is always under positive accurate automatic control, both as to temperature and Relative Humidity.

Carrier Automatic Control Instruments have proved themselves in hundreds of exacting technical applications and are, of course, as effective and reliable in the theatre as in Industry.

Thus the theatre owner who installs Manufactured Weather is assured not only that his theatre will be uniformly and constantly maintained at the conditions desired, but that this will be accomplished at the least possible cost—of steam in winter, of refrigeration in summer.

Figures in \$ and ¢

WHY, in dollars and cents, should the Exhibitor install Manufactured Weather in his theatre?

Because it pays—in dollars and cents.

Mr. Grauman's experience affords ample proof of this.

In his new Metropolitan Theatre the Manufactured Weather Equipment, for the theatre

→ *"Every day a good day"* →

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The Weather Vein →

proper, cost about \$26.00 per seat—of the approximately \$1000.00 per seat which represents the total cost of the house.

The normal attendance at the Grauman Metropolitan averages about 2.38 admissions per seat per day. Los Angeles is a highly competitive movie town. There are some very fine theatres there. Mr. Grauman himself operates three others.

An *average* of more than two admissions per seat per day, during both summer and winter, is an exceptionally good average, isn't it?

If you'll figure that out in terms of your own admission prices you'll have that answer—in dollars and cents.

What, then, does it *cost* to provide Manufactured Weather?

We've already said that in the Grauman Metropolitan it cost about \$26.00 per seat to install it. (Plus about \$16,000, which represents the cost of equipment provided for portions of the building other than the theatre proper. Most of this equipment was installed to condition the basement, containing the rooms used by the musicians, the engineers, electricians, ushers and House Staff, Mr. Grauman very wisely deeming it profitable to insure the comfort and health of his employees, as well as his patrons.)

The cost of operation is about \$500.00 per month (about one-fifth the cost of lighting)

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The Weather Vein →

during the winter when no refrigeration is used. This is less than half a cent per day per seat, or, if you figure that each seat is occupied twice per day, the cost of operating the air conditioning equipment is less than a quarter of a cent per day per admission!

In summer the cost of operation is of course considerable higher, amounting to approximately \$73.00 per day, or about 2c per seat per day, or, on the basis of two admissions per seat per day the cost of making every individual patron comfortable and *pleased* is just one cent per person per day!

(This does not, of course, contemplate the amortization of the equipment, which must be calculated separately in accordance with the policy of the owner, but the additional charge per person per day will be very small).

Perhaps these figures are not as detailed as you would like. Nor are they as detailed as we would like to give you. But quite obviously they are as detailed as possible. It is extremely difficult, if not, indeed, impossible to determine exactly what part, in dollars and cents, of the theatre receipts is directly due to Manufactured Weather.

Perhaps the most convincing argument for Manufactured Weather does not lie in the figures presented but in the very obviousness of the advantages which must accrue—and in the fact that Mr. Grauman, one of the most experienced

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