************* THE FLIGHT.

How John Edwards Got the Money For a Trip to Switzerland.

The sun had been too hot for John, any intruders." He drew the big Edwards. He was not a strong man doors together and barred them from at best, and he had been reckless. John was in a hurry, and instead of a window set in the roof, and the taking the shady side of the street he light was strong enough for the purcarelessly neglected this precaution poses of the clever workman, whose and defied the torrid rays. A good many people were affected that day by the heat, and their names made a long list in the morning papers.

When John Edwards returned to his office-he was the local representative of an out-of-town iron mill, his head ached and his skin seemed painfully parched. He bathed his face in cold water and, being a little dizzy, sat down suddenly and waited. A litpaper and glanced at it, and was surjoggled itself about. And when he tried to hold the paper very still and give the lines a chance to settle back i in their places he was alarmed by the way they resisted his efforts.

He let the paper fall presently and staggering to the washstand, soaked the towel in cold water and tied it about his head. Then he fell back into the chair again and almost in- have seen. stantly dropped alseep, if sleep it could be called.

When he awoke he was waving his hand to the motorman of a suburban He stepped aboard the platform and passed up the aisle to a front seat. He wasn't quite sure that he understood why he took the suburban He had thought only the day

before of making a little trip into the country and taking his wife with There was a pretty place, a gorge on a quiet stream, he liked to visit, and he concluded he was on his way there now. He was sorry he hadn't brought his wife with him.

He paid little attention to the progress of the car, and it was not until he was well out in the country that he looked about him. Stop 17," the conductor called.

John Edwardsremembered that the "stop" he used was "18," and when the car resumed its rapid pace he pressed the button.

As he left the car he noticed the conductor looked at him a little curi-

"Going over to the shed?" he asked. "I guess so," John answered, somewhat vaguely. 'Better look out for shotguns," the

conductor warned him. "Thank you," said John. "I'll remember.'

He swung himself to the roadway and took the slanting path down the embankment, and then followed the trail along the stream. Presently he noticed in the clearing at one side, half hidden by a grove of trees, a peculiar looking shed.

And just then a voice hailed him. A man was standing by the fence that inclosed the field, a young man, a hatless young man, very sallow, and with a short briarwood pipe in his mouth. "Hullo, friend," said this stranger. "In a hurry?"

No," replied John Edwards. He knitted his brows thoughtfully. am quite sure there is no claim upon

Good," said the stranger. "Like to take a ride?"

John Edwards looked around 'Yes," he said in the same delib- by ball bearings," he said.

crate way. Good again," said the sallow

stranger. "You are not a nervous man, are you?" John Edwards shook his head.

"Is it a question of nerves?" he

asked with a cunning smile. "Oh, no," replied the young man, "Nerves really have nothing to do with it. It's just a little novelty, you understand, and some people might be startled-but only at first. I can explain it to you more clearly if you

come this way.' The fence was low and John Edwards climbed it with much care. He was afraid the queer dizziness might come back. The stranger watched

"You seem a phlegmatic person," he said. "And that's just the temperament I want. And your weight is about right, too. This way, please." John Edwards followed the sallow young man, followed him to the barn-

like structure at the edge of the wood. John paused and stared up at the blue sky and the lazy white clouds. "Fine day for a flight," he said. The sallow young man turned or

him suddenly. "By George," he cried, "that's funny!" His sallow face grew dark.

You must have known about this." And he struck his knuckles against the closed doors of the barn.

John Edwards shook his head and smiled. "I do not understand you," he

"What is it you are concealing The intense expression of the sal low young man'r face slowly relaxed.

"I spoke hastily," he said. "I was afraid my secret had been discovered. have guarded it such a long time. you understood my anxiety you would forgive me. He produced a peculiar key and un-

locked the big doors, and, after a swift glance about the field, threw them open.

'Here is my secret." he said, and pheric conditions ideal. Come." his sallow face suddenly lightened. John Edwards felt no surprise when the stranger pushed the big doors John Edwards stepped forward and open and he found himself aiding him stared at the queer arrangement of rods and planes and wheels. in getting the airship across the threshold.

"An airship," he quietly remarked. "I am not surprised. I guessed there was an airship here as soon as I saw the building.

"Ferhaps," said the stranger, "you also guessed that I was going to ask you to accompany me on my first

John Edwards nodded. Yes," he answered, "I guessed stranger. He carefully seated himself behind the steering wheel and started the motor. John Edwards crept in

that, too." The sallow young man's eyes

ehind him and took his place on the "I'd be a little atraid of you if I were "Ready," said the stranger.

"Ready," echoed John.

The stranger pushed a lever, the in Clewland Plain Dealer. superstitions. But step in and let me close the doors. We don't want

the inside. The room was lighted by tools and materials were scattered

about. "Look it over," said the stranger, and there was an eager note in his The breeze suddenly freshened and voice. "Tell me what you think about

John Edwards began a coldly crit-ical inspection of the odd machine. He did not remember that he had ever been interested in machinery before. But the fact failed to surprise tle later he picked up the morning him. He peered here and there, went down on his knees to inspect a hidden prized to notice how queerly the type part, and tested the strength of the rods, and narrowly investigated the steering apparatus.

And the sallow young man watched him with a serious face.

Presently he looked up "It seems taut and compact," he

said, "I like the way you have connected your motor, and your pilot plane looks more practical than any I

The stranger quickly nodded. "That's my own idea," he said.

I'm getting it protected. Do you notice the cant of the major plane?" He looked anxious as his visitor turned again to the machine.

"I noticed it," said John. "It looks He paused and wrinkled his forehead. "Have you ever thought of an oscillating plane?" The stranger stared.

"No," he replied. "What do you mean?

"I mean a double plane that acts like a pair of oars," John explained. They work from the centre by cam and eccentric arrangement, and are belted to your motor. They feather the air and steady your centre of gravity. Here, let me show you." He drew an envelope from his coat pocket, and, picking up a pencil from the workbench, rapidly made a sketch, the sallow young man eagerly following his quick pencil strokes.

"Yes, yes." the stranger whispered. me?

will revolutionize things."

you follow the diagram?"

down the pencil and drew back.

with the idea?" he stammered.

"I haven't decided," he replied.

The stranger's eyes snapped.

John smiled cunningly.

ing with the pencil.

"Of course,

"Yes, yes."

want for it?"

John Edwards pointed at the draw-

The friction here can be reduced

"And the sweeps-I like that term

The stranger scanned the drawing

"Wh-what are you going to do

"See here," he said, "I'll buy that

idea if you'll let me. What do you

John Edwards considered the ques

"For some time," he slowly said,

my wife and I have been considering

a trip to Switzerland. My mother was

born over there and I have a strong

desire to see her early home. We de-

cided long ago that when we had a

thousand laid by that we didn't have

any other use for, we would take it

and go abroad." He tried to look at

the stranger as if the matter was one

of the utmost indifference. "I'm in-

clined to think," he lazily added,

that I might let you have the sole

right to this improvement for the

price of the trip to the Alpine land.

his light flannel shirt and drew out a

flat pocket book. From this he

find twenty fifty-dollar bills there.

For these I get the sole right to the

oscillating sweeps. Give me your

hand. It's a gentleman's agreement

Your word is as good to me as your

John Edwards drew an envelope

from his coat pocket and after laying

the bank bills in it carefully replaced

"And now," said the sallow

stranger, "let us prepare for a flight.

The machine is ready, the atmos-

The stranger threw a hurried

giance about him and then closed the

"If you fear the cold I will get you

a thicker coat," he said, "but I am not

"Then we are ready," said the

"I'm all right," John replied.

bond.

the book.

big doors.

counted a number of bank bills.

The stranger thrust his hand inside

"Here you are," he said. "You'll

tion with an air of great gravity.

每~~~~~~~~~~~~~~~

"The President Who Was Not Afraid to Do Right."

HARLES J. BONAPARTE, late Attorney-General of the

United States, has written in the Century of the "Experiences of a Cabinet Officer Under Roosevelt." He

Many years ago a well-known man in my native city

closes his article with this appreciation of Roosevelt, man

said with great contempt of one of his neighbors: 'Oh, he is a miserable creature! He hasn't \$10,000 in the world!' The sentiment underlying this remark has become in certain

circles odiously familiar. If a man has a million, he is there

held entitled to treatment as a human being; if he has ten, he is named with reverence; if a hundred, he is approached with nine prostrations. Against this sordid abasement the

volted, and Theodore Roosevelt gave a voice to their protest.

His countryman will remember him as a President who was not afraid to do right."

您大大大大大大大大大大大大大会

better than planes-can have a play you. A policeman had seer you

of fifteen degrees at the apex. Do boarding the suburban car and so we

more closely as John Edwards tossed clay on the way home—and you'll

soon be out again."

me?" he asked.

of an airship.

of the wood?"

rest.

doesn't it?"

about it.

mid.

He faintly smiled.

you must write it all out."

of that trip abroad."

He faintly laughed.

John faintly nodded.

You stumbled and foll "

"Didn't you see it?"

against his.

soiled.

and conscience of the American people have re-

aeroplane ran forward on its starting wheels and suddenly arose from the earth. It arose gradually, and had half crossed the field before it reached an altitude sufficient to clear the

The stranger brought it around with a graceful sweep, and as the planes canted John Edwards threw his weight to the opposite side and held the wild thing to an even keel. "All right?" cried the stranger.

"All right," replied John. He had no fear. His soul seemed o exult in this strange adventure. He

tried to wonder at himself. And now the airship sailed over the he woods and across the gorge and above a great field of waving corn.

came in fitful puffs. "She's a wonder, isn't she?" cried the exulting stranger.

"Yes," John answered. "Glad you came?"

"Yes, yes. The cool breeze felt very good as t stirred John's damp hair. And then be realized that he had no hat.

He must have left his hat in the office.

That was strange. They were skimming along at s height of perhaps 100 feet, and had voyaged a dozen miles or more, when the stranger called back to him: "Hold fast," he cried; "I'm going

to try a dip. John clutched a rod and clung to it as the planes canted and the aeroplane dove down. It was a reckless experiment. For a moment it seemed that a collision with the earth was inevitable. But the stranger flung the craft around, the planes careened and John Edwards-whose strength seemed to ooze away like water—was

flung to the ground. He heard the stranger cry out, he saw the planes arise, and then he

lost consciousness. When he awoke he was in his own bed at home and the gentle face of his wife was bending over him. "Hullo," he faintly said. He was

strangely weak A wonderful smile overspread his wife's face. She laid her cool hand on his head.

"Not a bit of fever," she said. 'You're all right now." He looked at her inquiringly.

"You have had a little touch of sunstroke, John. Dr. Barclay says you will be all right in a few days. "How did you happen to look for

"The janitor felt worried when you

hurried by him, hatless and excited.

He tried to stop you, but you

would not heed him. Then he tele-

phoned for me and I came down to

the office-and met Cousin George in

the hallway and he had his car at

the door and we started out to find

trailed it. And pretty soon we saw

you walking in a field. We got you

And the laid her cheek lovingly

"How did I appear when you found

"You-you were not yourself, dear.

"Yes," he quietly said, "I fell out

She gave him a frightened glance.

"See an airship? No. John."

He looked at her earnestly.

"No, no, John. You were dizzy,

"Nor the aerodrome at the edge

"No, no, John. You have been

working too hard, dear. You need

"It seemed very real," he said. "I

wonder if that sort of thing is com-

mon to sun scorched brains? It's

very hard to bring myself to admit it

was just hallucination. I went up in

an airship with a stranger and fell

"Yes, John. You must forget all

"Not until I tell you the story," he

And so he told it as well as he

could remember. And his wife, close-

ly watching him, listened attentively.

said, "and when you are quite well

"I know it all was hallucination."

ne slowly said, "but I give it up with

strong reluctance. I-I felt so sure

"Never mind, dear," said the lov-ing voice. "We can wait."

"Helen," he said, "I am going to do

something very foolish. Bring me the

coat I wore, please. I am going to

look for the phantom money the

She was smiling as she handed him

the coat. And he smiled a little

shamefacedly as he took it. When he

caught her amused look he suddenly

laughed aloud and hastily drawing

forth the envelope he remembered so

phantom sky pilot gave me."

He was silent for a moment.

"A very strange dream, dear," she

out. It does sound preposterous,

You seemed to have fallen in the

field, because your clothes were

aboard the car and picked up Dr. Bar-

KNIGHTS TEMPLAR HOLD TRIENNIAL IN CHICAGO

Great Conclave Presided Over by Acting Grand Master Melish---Wonderful Parade Through Elaborately Decorated Streets Is the Most Spectacular Feature.

sioners.

mainly with ladies whose beautiful

summer costumes made it like a vast

garden. About 50,000 persons were in

this immense stand, as at its center

was a gorgeous throne on which sat

the acting grand master, William

Bromwell Melish of Cincinnati, who

became head of the order on the re-

cent death of Grand Master Henry W.

Rugg of Providence, R. I. Mr. Melish

will be regularly elected grand master

Just north of the Art Institute the

parade passed before another review-

ing stand in which were Mayor Busse,

the city council and the park commis-

Beautiful "Templar Way."

turned west to State, where they en-

stretch extended from Randolph to

Van Buren street and was made beau-

tiful by a handsome arch and massive

Corinthian columns of pure white

erected thirty-three feet apart on both

sides of the street. Festoons of natur-

al laurel connected the columns, and

the bright red cross and the shield

and coat of arms of the order were

prominent in the scheme of decora-

Moving south to Jackson boulevard,

yet another reviewing stand

the knights again turned west, and

near the federal building passed be-

which accommodated Governor Deneen

and his staff. Marching north on La-

Salle street, the parade passed be-

neath the grand commandery arch of

pure white which spanned the street

at the La Salle hotel, the headquarters

of the grand commandery of Illinois.

This was a beautiful structure de

signed by one of Chicago's most fa-

mous sculptors. Upon its top stood

the figures of mounted knights four-

teen feet high. At the new city hall

on Washington street the parade was

dismissed, after marching forty-three

Care For the Marchers.

of for the comfort of the paraders and

Everything that could be thought

Wednesday and Thursday were the

days set apart for the drills for which

Entrancing Scenes at Night.

arches, festoons and columns of the

decorative scheme were brilliantly il-

dition to the "Templar Way," the mer-

chants had put up decorations that

transformed the great shopping dis-

Undoubtedly the most spectacular

in Grant park on the lake front, re-

producing in colossal size the official

was 150 feet high and its 5,000 power-

ful electric lights of varied colors

brilliantly illuminated all that part of

Much of the success of the conclave

must be attributed to the efforts of

John D. Cleveland, grand commander

of Illinois and president of the tri-

eminent grand generalissimo of the

grand encampment and W. Frank

Pierce of San Francisco the grand

Among the most noted of the visit-

ing masons from other lands are: The

Right Hon, the Earl of Euston, pro-

England and Wales; the Lord Athlum-

ney, past great constable; Thomas

Fraser, great marshal; R. Newton

Crane, past great herald; F. C. Van

Duzer," past great standard bearer;

H. J. Homer, acting grand master ban-

ner bearer; John Pergueson, past pre-

eptor of England and Wales, and the

Right Hon. Luther B. Archibald, most

eminent grand master of the great

grand master of the great priory

trict into a veritable fairly land.

as especially beautiful, for all

At Washington street the marchers

before the close of the conclave.

Chicago.-Marching to the music of | length, and this needed no decoraforty-two bands and the almost equal- tions, for it was filled to its capacity ly melodious cheers of hundreds of thousands of their relatives, friends and admirers, some 50,000 Knights Templar took part August 9 in the greatest parade ever held by the or Their waving plumes and fine uniforms were fittingly set off by the beautiful decorations of the streets and buildings, and the scene was one that will not soon be forgotten by those who were fortunate enough to witness

This magnificent parade was the climax, in a spectacular way, of the thirty-first triennial conclave of Knights Templar, which opened here on Sunday, Aug. 7. In accordance with the time honored custom of the grand encampment, the doings of the week began with divine service.

Begin With Divine Service. The sir knights selected Orchestrs hall for this purpose and entirely filled



blocks.

the body of that hall to listen to a sermon on "Templarism" delivered by Rev. Dr. George H. MacAdam of Madi- the spectators was done by the local son, Wis., in the absence of Sir Knight | committees. In nearly every block George C. Rafter of Cheyenne, Wyo.. very eminent grand prelate of the grand encampment. The music was in charge of the grand organist of the equipment for emergency cases. In grand commandery of Illinois, the addition, emergency hospitals to choir consisting of several male quar- kept open day and night during the tets belonging to the order in this conclave were established at many state. The Grand Encampment of the points in the center of the city, and United States marched to the hall es- at the West Side ball park which was corted by sir knights of the various selected as the place for the competicommanderies of Cook county, com- tive drills manded by Benjamin S. Wilson, chairman of the escort committee. In many of the leading churches of the city handsome trophies are awarded, and special services were held which were band concerts, sight seeing and many attended by visiting knights and their receptions were on the program. families.

Monday was devoted mainly to the receiving of the grand and subordinate commanderies and escorting them to their hotels. It is estimated that fully 100,000 visitors came with the knights and that about 300,000 other excursionists have flocked to the city this week in consequence of the conclave. Of course every hotel was thronged and thousands of the visitors found quarters in private residences.

On Monday evening all the local and visiting commanderies kept open house at their respective headquar ters, and many of the visitors found their way to the various amusement parks and the theaters.

Parade of The Knights.

The "grand parade" of Tuesday was the largest parade of Knights Templar ever held. The preparations were elaborate and Michigan boulevard was most elaborately decorated. The sir knights formed in line of march on ennial executive committee. Arthur the boulevard south of Thirty-first MacArthur of Troy, N. Y., is the very street, and signal to move was given by the guns of Battery B, I. N. G., the detachment for the purpose composed of Knights Templar all of whom are members of the battery The same detachment fired the salute to the grand master.

Marching northward in Michigan boulevard, the parade passed, near Hubbard court, beneath an entrance arch built in the form of an ancient hattlement with its towers and tur rets. This was intended to represent the entrance to the city, and as the column passed under it, buglers stationed on its heights heralded the approach of each grand division.

Next the knights came abreast of the first grand stand, one-half mile in ortory of Canada, and official staff.

THE WIND AND OUR NERVES and disease. Why the Cool, Pure Northwest

the city.

captain general.

Breezes Are More Invigorating Than Those From the East. The east winds hug the earth more closely and gather moisture, dust and They are cold and humld. altogether forming an enervating in fluence on human and animal life and rendering it susceptible to the disease germs which the winds carry

and disseminate. The cool, pure northwest winds come from a region of dry, highly electrified air where ozone exists in comparatively large quantities. They are invigorating. The tramework of nerves in the human being is like a delicate electrical apparatus. erves being the wires and the brain and ganglia receiving and distributing centers.

Every one knows that a telephon works better on a clear, dry day than on a wet, muggy one. The moist atosphere lessens vitality. The nerve wires grow faccid and heavy. The

low spirits, melancholia, distorted outlook, faulty assimilation

The opposite effects flow from the northwest winds. The west and northwest winds keep the mucous membranes of the body in good working order. The coating of moisture which is always present with the east wind disappears. Absence of any wind if long continued has a bad effect on the human body and mind.

A prolonged calm means lack of ven tilation on a great scale. The winds serve to mix in normal proportions the gases which compose the atmosphere and in this way they are con ducive to health up to a certain point. Beyond about 20 miles at hour their influence begins to be unthe favorable.

Driven Out.

Bacon-I bought my wife a horse and carriage, and she drove me out

every day. Egbert-Weil, I bought my wife a day .-- Yonkers Statesmen.



Concrete Fence Posts.

Fence Posts." This bulletin goes into details, gives full and minute instructions, enabling the farmers to build their own fences with the farm labor. By applying to the Office of Public Roads, United States Department of Agriculture, Washington, Farmers' Bulletin No. 403 will be sent without charge.

Setting Hens.

Good hatches cannot result if the sitters are bothered by the other hens, as they are sure to be when set where outsiders can get to them. Neither do they batch quite so well where they must be fastened up tight, Many hens of many minds, and sitters best to impress such truths, so remember before another hatching season -E. C., in the Indiana Farmer. tered on the "Templar Way." This

Really the whole subject of alfalfa might well be treated under the two heads, "Seeding" and "Harvesting," so very inclusive are these two phases | nt into this space, possibly just a litof the subject. Without careful seed- the smaller than the floor. ing one cannot have a crop to harvest, section of ordinary stove pipe, seven and without careful harvesting he inches long and seven inches in dimight almost as well not have a crop. Both call for intelligence and pains- tin will do. There must not be any taking farming, and much patience solder about the tin part of it. Get and hard work. But the rewards of your the er to put a tight cap or lid these virtues and labors are heavy on one and of this stove pipe. yields from the most valuable forage make a hole in the large tin sheet plant. If it is worth nine times as seven inches in diameter and fasten much as timothy, it can well demand a little more time and labor than and a tinner's tools to do this. The the average crop. -From Coburn's small pipe leading off from this is two The Book of Alfalfa.

Dairy Cows and the Silo.

A Wisconsin dairyman says that the silo and good feed at reasonable cost is making this method of handling dairy herds feasible and popular. With excellent succulent feed on hand about all the year, the dairyman plans to have his calves the lamp chamber and make the lamp come at whatever time he considers will best serve his own interests. The majority of the dairymen in the southern part of my county are now equipped with silos, and they would now consider it a hardship to have to do without them. In the northern section the use of silos is less general. though they are now fast coming into

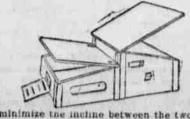
The desire of the dairymen to build up their dairy herds in both quality and quantity is the reason why the percentage of heifer calves combus Into market is so small. With the ensilage feed dairymen can mature their good heifer calves without great expense, and they are holding them back for that purpose, in the mean while gradually selling off the old and less profitable cows and building up herds of great milk producing capabilities.

The scene in the streets at night Directions For Modeling a Made Brooder.

With a little mechanical ability and luminated, and on State street, in ad- a few ordinary tools a good broader may be made in spare moments out of an ordinary large dry goods box. Obtain a substantial box made of three-quarters to seven-eighth-lnch make the hover about two by two, stuff and about two and a half by two feature of the night display was the and a half by four feet. By glancing wonderful electric set piece erected at the illustration of the box you can readily see the kind of box that is desirable and how the box is sawed into are made long enough so the top of emblem or badge of the conclave. it | two parts. You will notice that one | the hover will easily clear the top of part is larger than the other. The the tin dome of the stove pipe. Unlarger part is used for the hover and, derneath the hover tack a piece of tin on account of the lamp being under- about twelve inches by twelve inches deeper than the scratching apart- sibility of the hover getting too hot. ments. The large part should meas- Take an old piece of woolen cloth and ure two and a half to three feet in tack it in rows, starting at the outside box is sawed; the smaller part will or four rows. The woolen curtains measure two feet in height on the should very nearly touch the floor so higher side. If the box you obtain drafts cannot strike the chicks' feet, does not conform to these dimensions saw the box in two proportionately.

After having sawed the boy in two notice the illustration of the brooder. showing the way the two parts are then put together. The floor in the larger or hover part is raised from ten to twelve inches from the bottom of the box so the lamp may be placed under the floor. The size of your pressing against their backs. lamp should govern the height of the floor from the bottom of the box. Two or three inches, of course, may be One ventilator is placed at the top of counted off from the height of the brooder on one side and one at lamp, as the flue will go up under the the bottom on the opposite. A piece tin heater that far and still burn well.

An incline is made the whole width of the scratching apartment from the floor of the hover floor to the scratching floor. The floor in this part also should be several inches from the ground, to be high and dry and to

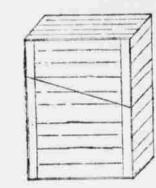


floors. There will be a six-inch incline from the ground to the brooder to move the brooder about. Be sure door, and a six-inch incline from the scratching floor to the hover floor. three inches, as the lamp confined in Little chicks will easily learn to ascend these short inclines, but when of heat and these will serve to take made any longer much difficulty will off the surplus and keep the floor of he experienced with the chicks the the chick chamber cool. A warm first weeks and probably several will brooder floor causes leg weakness dle from erposure on account of not being able to find their way back to the warm hover. These inclines, it is er. A glass lamp will crack too easily to be remembered, are made the when it gets warm and should neve whole width of the bropder, so the tittle chicks cannot back under it.

the scratching room, One is placed The United States Department of in the hover room, but it cannot be Agriculture has issued an elaborate seen in the illustration, as it is on the bulletin on the subject of "Concrete opposite side from where the lamp fume is placed. These windows are made long and narrow to avoid cutting more boards in the box than may be absolutely necessary. Then long, narrow strips of glass do not cost as much as the larger pieces. The panes of glass are held in place by strips of wood from the inside and plenty of putty on the outside.

The roof on both compartments is made of good lumber and made very substantial and covered with a good roofing paper or tin and painted. The roof hinges at the top, as shown in the illustration, so access to any part of the brooder will be easy and also for convenience in cleaning. Notice the wide eave made all around on the then given liberty at certain times. roof. This is to throw the water well away from the walls of the broader, are not inclined to get off their eggs and helps very materially in the apat the same time. Incubating time is pearance. See that the lid-roofs fit down snugly against the walls of the brooder by placing a buffer of a couple of thicknesses of cloth all around the edge of the box on the inside in such manner that the lid will press down firmly against it.

In making the heater measure the inside dimensions of the larger apartments. Obtain a piece of tin that will Then a ameter. Do not think that a gallon the stove pipe to it. It takes a tinner inches in diameter and has a tin protector to keep the wind from blowing directly in it. Do not fasten the small pipe directly to the stove pipe, but have it detached to fit on the collar of the stove pipe so you can get the stove pine up through the floor from the lower side so the large tin sheet will cover the whole of the ceiling of



room firencoof. With this large sheet of tin lining the entire ceiling of the lamp room, one could build a pretty hot fire before anything would catch fire. A tin shield is easily made to fit within a half-inch or so of the stove pipe to keep the chicks from commity to the hot pipe by cutting holes in a piece of tin four

The making of the hover is the next thing in order. If your box is two and a ball by two and a half feet, leaving a six-inch space about the sides of the hover. The hover is made of light pine or poplar boards threefourths of an inch thick, and the legs neath the floor, necessarily must be to reflect the heat and avoid any posheight on the higher side after the edge of the hover and making three We have seen several brooders fail because the curtains were too short, Be sure to use wool for the curtain if you can possibly get it, as it holds the heat much better than cotton. Don't be afraid to use plenty of it so it will be cozy and as near like the down breast of the mother hen as possible. Chicks like to have something

> A ventilator is made by the tinner out of scrap tin to open any distance. of tin bent in a half circle shape is made to fit over the ventilator opening on the inside and in the one case conveys the air down to within an inch of the floor and in the other allows the surplus heat to pass down and out. This system of ventilation avoids any possibility of drafts and et admits plenty of fresh air and lets the carbon dioxide pass off from near the floor where it is more in abundance.

> A door is made for the lamp at the back side of the broader. Also at the back of the brooder make two oblong hand holes just beneath the ceiling of the lamp chamber. These holes will give plenty of ventilation to the lamp and are used as hand holes by which these holes are at least one inch by so small a room makes a great amount

> Purchase a good galvanized tin brooder tamp and a sun binge burnbe used. The fine of the lante shot also be made ci lin .- To liveryalis

minimize the incline between the two

A window is placed on each side of lows.