of Delinquent for Year 1911

ued from Last Page.) 4, \$16.60; lot 5, \$16.60; 14, \$16.60; lot 5, \$16.60; 60; lot 7, \$16.60; lot 8, 9, \$16.60; lot 10, \$16.60, 6,60; lot 12, \$16.60; lot Herron, in blk 65, lot 17,

rty Johnson, in blk 1, lot

30; lot 2, \$29.05. North Ferndale. ampbell, in blk 5, lot 3, lot 4, \$2.08, larry, in blk 6, lot 1, tax.

\$2.08; lot 3, \$2.03; lot 5, \$2.08; lot u, 8; lot 5, \$2.08; lot 6, 7, \$2.08; lot 8, \$2.08.
Zurcher, in bilk 8, N ½ lot 1, 54; N ½ lot 4, \$1.58, \$1.58; N ½ lot 6, \$1.98. nnell, in bik 8, S 1/2 lot 3,

Ferndale Park. laden & C. H. Martin, 1st Halbert, lot 3, tax \$17.53. Short, lot 5, tax, \$15.75.

ranfield Land Co., in blk tax 32e; lot 2, 32e; lot 3, 4, 52e; lot 5, 32e; lot 6,

26; lot 10, \$1.26; lot 1!, 12, \$1.26. arshfield Land Co., in bik

tax 95c; lot 11, 95c, lot Asheroft, in blk 9, lot 7; lot 4, \$2,36. amphell, in blk 26, lot 26, lot 27, \$2.36; lot 29,

29, \$2,34. Watkins, in bik 33, lot 1, let 2, \$1.89. Wall, in blk 34, lot 1. lot 2, 95c.

arshfield Land Co., in bik 95e; lot 24, 95e; lot 55. Culbertson, in blk 36, lot lie; lot 12, 95c. archfield Land Co., in blic

13, tax. 95c; lot 24, 35c; 85c; lot 26, 95c; lot 27, 18, 95c; lot 29, 95c, lot ot 31, 95c; lot 32, 95c. wanton, in blk 38, und. 2, 55c; und. 1/2 lot 2, 95c. E. Stoddard, in blk 40, int

Peterson, in blk 41, 10t 12.37; lot 18, \$2.36, lot lot 20, \$2.36. t Trust Co., in blk 41, .ot \$2.37, lot 22, \$2.37. Bents, in blk 43, lot 31

Hattle Leaton, in blk &c.

\$9.93; personal property, 8, \$9.92. larshfield Land Co., in bl tax, \$2.37; in blk 57, lo: 2e; lot 2, 32e; lot 3, 32e; le; lot 5, 32e; lot 6 52; s, lot 1, tax, 32e; lot 2, 32c; lot 4, 32c. & Sengstaken's Add. t.

East Marshfield. a Boat & Mach'y Co.

lot 18, 38c. P. Miller, in blk 5, lot 29 Iown of Eastside.

link, in blk 3, lot 8, tax 9, 16c B. Sandohl, in blk 14, 101

Bunton, in blk 14, lot 28, Herrett, in blk 33, lot 1-

Sengstaken, in blk 34, 1 st ter's Add. to Marshfield.

ennie Reed, in blk 3, tot 27; lot 6, \$16.54; personal rshfield Gardens.

Sec. Richards, lot 7, tax Church, lot 8, tax, \$2.46; \$5.54; personal property,

farshfield Heights. agstacken in blk 3, lot 6,

Halin , in blk 8, lot 7, tax ot 8, \$1.58. agstacken, in blk 8, lot 9. W 1/2 lot 10, tax 79c. owner, in blk 8, E 1/2

estacken, in blk 8, lot 11, lot 12, \$1.58. era Add. to Marshfield. Smith, in blk P. lot 1, tax.

\$ 10 ft. lot 2, \$1.99, Hodgins, in blk W, lot 5, Magary, in blk X, lot 3, tax, ersonal property, \$2.08.

Harris, in blk Y, lot 1. tax, t 2, \$6.23. Turpin, in blk Z 3 ! 3 n. 14.82; personal property.

1-3 lot 9, \$4.57; S 1-3 'nt a Add. to Marshfield.

Morrow, in blk 1, lot 10

acken Add. to Marshfield. Caldon, in blk 3, lot 7, Lax

Merchant, in blk 5, lot 2, lot 3, \$3.12. P. Morris, in blk 5, lot 9, 12; lot 10, \$3.12; lot 1-,

Brandt, in blk 9, lot 13, Lax

Ogren, in blk 10, lot 8,

\$4.15; lot 2, \$4.15. Edith B. Wyrick, in blk 2, lot 6 tax, \$6.23.

Bayview Add. to Marshfield. A. S. Dibble, in blk 1, lot 7, tax \$3.12.

Hildeband & Kennedy, in blk 7 lot 27, tax, \$1.04; lot 28, \$1.04, James P. Morris, in blk 10, lot 1, tax, \$3.12; lot 2, \$3.11; lot 3, \$3.12; lot 4, \$3.11; lot 5, \$3.12; lot 6, \$3.11; lot 9, \$2.49; lot 10, \$2.49; lot 11, \$2.49; lot 12, \$2.49; lot 13, \$2.49; lot 15, \$2.49; lot 16, \$2.49. Fruitvale.

Wm. Siggs, lot 14, tax \$2.94. Boise Add. to Marshfield.

K. I. Perky, trustee, in blk 2, lot tax, 68c; lot 6, 68c; lot 7, 682; lot 8, 68e; lot 17, 68e; lot 18, 63e; lot 19, 68c; lot 20, 68c; lot 21, 6sc; lot 22, 68c; lot 23, 68c; lot 24, 6 lo. J. A. Johnson, in blk 4, lot 5, tax, 68c; lot 6, 68c; lot 7, 68c; lot 3, 68c; lot 9, 68c; lot 10, 68c lot 11, 68c

K. 1. Perky, trustee, in blk 4, io: 18, tax 68c; lot 19, 68c; lot 20, 63c; lot 21, 68c.

Arthur R. Wright, in blk 5, lot 1, tax, 68c; lot 2, 68c; lot 3, 68c.

K. I. Perky, trustee, in blk 5, ot 6, tax, 68c; lot 7, 68c; lot 8, 68., lot 9 68c; in blk 6, lot 11, tax, 68c. lot 12, 68c; lot 13, 68c; lot 14, 68c Halbert, lot 3, tax, \$15.75.
Short, lot 5, tax, \$15.75.
East Marshfield.

East Lot 12, 68c; lot 13, 68c; lot 12, 68c; lot 23, 68c; lot 24, 68c; lot 23, 68c; lot 24, 68c; lot 25, 68c; lot 27, 68c; lot 28, 68c; lot lot 16, 68c; lot 22, 68c; lot 23, 68c;

tot 26, 68c; lot 27, 68c.

Florence Damon, in blk 13, lot 28, tax, 68c; lot 29, 68c; lot 30, 68c; lot 31, 68c; lot 32, 68c.

K. I. Perky, trustee, in blk 14, ic. 24, tax, 68c; lot 25, 68c; lot 26, 63c lot 27, 68c.

L. Kee, in blk 15, lot 8, 68c; iot 9, 68c; lot 10, 68c; lot 11, 68c; lot 12, 68c; lot 13, 68c.

K. I. Perky, in blk 15, lot 15, tas 8c; lot 16, 68c; lot20, 68c; lot 21, ot 16, 68c.

W. M. Van Iron, in blk 20, lot 1, ax, 68c; lot 2, 68c; lot 3, 68c; lot 1, 68c; lot 5, 68c; lot 6, 68c; lot 7, 8c; lot 8, 68c.

K. 1. Perky, trustee, in blk 20, lut 23, tax, 68c; lot 24, 68c. Mrs. S. L. Everest, in blk 20, lot

27, tax, 68c; lot 28, 68c. K. I. Perky, in blk 20, lot 31, tax, Se; lot 32, 68c; in blk 21, lot 6, tax 88c; lot 32, 68c; lot 18, 68c; lot 13
8c; lot 20, 68c; lot 21, 68c; lot 22, 68c; lot 3, 68c; lot 4, 68c; lot 5, 68c; lot 6, 68c; lot 7, 68c, lot 8, 68c; lot 6, 68c; lot 9, 68c, lot 8, 68c; lot 1, 68c, lot 1, 68 10, 68c; lot 11, 68c; lot 12, 68c, lot 13, 68c; lot 14, 68c; lot 15, 68c; lot 16, 68c; lot 17, 68c; lot 18, 68c; lot 19, tax 68c; lot 10, 68c; lot 11, 68c; lot 17, 68c; lot 13, 68c; lot 14, 68c; lot 15, se; lot 16c, 68c; in blk 28, lot 9, Se; lot 10, 68c; lot 11, 68c; lot 12, 68c; lot 13, 68c; lot 14, 68c; lot 15, 68c; lot 16, 68c; lot 23, 68c; lot 24 68c; lot 25, 68c; lot 26, 68c.

E. C. & F. R. Walroth, in blk 28, lot 27, tax, 68c; lot 28, 68c; lot 25,

68c; lot 30, 68c. 68c; lot 29, 68c; lot 30, 68c; lot 31, 68c; lot 32, 68c; in blk 31, lot 25, 68c; lot 26, 68c; lot 27, 68c; lot 28, 68c; lot 29, 68c; lot 30, 68c; lot 4, \$3.15; in blk 3, lot 1, \$3.15; lot 31, 68c; lot 32, 68c; in blk 33, lot 2, \$3.15; lot 3, \$3.15; loc 30, 68c; lot 26, 68c; lot 27, 33.15; lot 3, \$3.15; lot 4, 30, 68c; lot 31, 68c; lot 32, 63c; \$3.15; lot 3, \$3.15; lot 4, 30, 68c; lot 1, tax, 68c; lot 2, 63c; \$3.15; lot 5, \$3.15; lot 6, \$3.15; lot 3, 68c; lot 4, 68c; lot 2, 66c; lot 7, \$3.15. lot 3, 68c; lot 4, 68c; lot 5, 66c; ot 6 68e; lot 7, 68e; lot 8, 68c.

C. H. Roberts, in blk 37, lot 1, ux, 68c; lot 2, 68c; lot 3, 68c, lot 68c; lot 5, 68c; lot 6, 68c, lot 68c; lot 8, 68c; lot 9, 68c; lot 10, 68c; lot 11 68c; lot 12, 6oc; ot 13, 68c; lot 14, 68c; lot 15, 66c; ot 16, 68c; lot 17, 68c; lot 18, 68c; ot 19, 68c; lot 20, 68c; lot 21, 63c; ot 22, 68c; lot 23, 68c; lot 24, 64c; ot 25, 68c; lot 26, 68c; lot 27, 68c; lot 28, 68c; lot 29, 68c; lot 30, 64d; ot 31, 68c; lot 32, 68c.

8c; lot 18, 68c; lot 21, 68c; lot ??, 48c; in blk 39, lot 1, tax, 68c; lot 3, 68c; lot 6, 68c; lot 7, 68c; lor 3, \$4.15; lot 2, \$4.15; lot 3, \$4.15, 68c; lot 17, 68c; lot 18, 68c; lot 19, lot 4, \$4.15; lot 14, lot 1, tal, 68c; lot 20, 68c; lot 21, 68c; lot 22, \$4.15; lot 2, \$4.15; lot 3, \$4.16; 68c; lot 23, 68c; lot 24, 68c; lot 4, \$4.15; lot 5, \$4.15; lot 6, \$4.15; lo 29, 68c; lot 30, 68c; lot 31, 65c; \$4.15. lot 32, 68c.

C. H. Roberts, in blk 40, lot 1, cax 68c; lot 2, 68c; lot 3, 68c; lot 4, lot 8, \$2.08, 68c; lot 5, 68c; lot 6, 68c; lot 7 F. A. Gold lot 8, 68e; lot 9, 68e; lot 10, 68c; lot 11, 68c; lot 12, 68c; lot 13, 68c; lot 14, 68c; lot 15, 68c; lot 16, 68c; lot 17, 68c; lot 18, 68c, 'nt Held Investment Co., in blk 19, 68c; lot 20, 68c; lot 21, 68c; lax \$24.90; lot 10, \$4.15. lot 22, 68c; lot 23, 68c; lot 24, 63c; lot 25, 68c; lot 26, 68c; lot 27, 68c; lot 28, 68c; lot 29, 68c; lot 30, 68c; lot 31, 68c; lot 32, 68c.

K. I. Perky, trustee, in blk 41, lot 7, tax, 68c; lot 8, 68c.

K. I. Perky, trustee, in blk 44, lot 1, tax, 68c; lot 2, 68c. C. H. Roberts, in blk 45, lot 1. tax, 68c; lot 2, 68c; lot 3, 68c, lot

4, 68c; lot 5, 68c; lot 6, 68c; lot 7, 68c; lot 8, 68c.

K. I. Perky, trustee, in blk 46, lot delinquent a tax certificate of ac-M. Trego, in bik 9, lot 10. lot 4, 68c; lot 2, 68c; lot 3, 6de; linquency will issue therein, as property and property, \$4.10; lot 4, 68c; in bik 47, lot 1, tax, vided by law. The foregoing is the brandt 12, \$33.20. 68c; lot7, 68c; lot 8, 68c; in blk 49, mitting should add 10 per cent lot 4, tax, 68c; lot 5, 68c; lot 6, 68c; in blk 50, lot 7, tax 68c; lot 8, law, interest at the rate of 1 per cent.
68c; lot 9, 68c; lot 10, 68c; lot 11, per month from the 1st Monday in 68c; lot 12, 68c; in blk 51, lot 1. April, 1912, and the cost of publishing is lot 21, \$2.08.

68c; lot 12, 68c; in blk 51, lot 1. April, 1912, and the cost of publishing is lot 21, \$2.08.

68c; lot 2, 68c; lot 3, 68c, in ling, which amounts to 50 cents per blk 52, lot 5, tax, 68c; lot 6, 68c; line. blk 52, lot 5, tax, 68c; lot 53, iolot Blk A. Sengstacken's lot 7, 68c; lot 8, 68c; in blk 53, iolot 7, 68c; lot 2, 68c; lot 3, 65c; Stone, in blk 2, lot 1, tax, 68c; lot 2, 68c; lot 3, 65c; in blk 2, lot 1, tax 68c; lot 1, tax 68c; lot 2, 65c;

000000000000 Humor and Philosophy By DUNCAN M. SMITH

0000000000000 GROWING LESS.

THE circus does not seem the same It did in years gone by. Perhaps the light is just as bright, The tight rope just as high.

The spangled belies may ride around In just as many tracks, The band may play full loud and gay, But something still it lacks.

The elephant still moves around With slow and stately trend. The monkeys may be quite as gay When they are peanuts fed. The lion roars, defying those Who would its spirit tame. The juggler's skill holds out, but still It isn't just the same,

Big Lungs still stands outside and tells The people what they get As recompense for fifty cents, And it's enough, you bet. His voice is just as high and shrill To hypnotize the crowd And bring them near, but to my ear

That doesn't match the old? The tent's as wide; the show inside Is bigger, I am told. The fault, if any fault there be, Is in myself in truth. For when I gaze on its displays I lack the eye of youth.

It doesn't sound as loud.

Innocent.

"He fell from the forty-second story of the great skyscraper to the hard granite pavement below."

Was he hurt much?" "I said he fell from the forty-second story.

"Was he hurt?"

"Yes, if you must know, he was hurt much. I said he fell from the fortysecond story. Hear that! He was killed! Understand? K-I-I-I-e-d. killed! Get it?"

"Well, you needn't get fresh. I didn't kill him. I have a perfectly good Sc; lot 22, 68c; lot 23, 68c; lot 24, alibi. I was busy killing a man about 8c; in blk 17, lot 9, tax, 68c; lot your size and build about that time 10, 68c; lot 11, 68c; lot 12, 68c with an ordinary ax. Get that? An bt 13, 68c; lot 14, 68c; lot 15, 68c; ax-ax. ax. Understand? And I didn't alibi. I was busy killing a man about wear all of the edge of neither."

That's Sufficient.



"I am poor, but honest." "Don't waste words." "Don't what?" "Don't say 'but honest.' "

Some Difference. Yes, borrowing is sorrowing,
Though that depends a lot,
I'm very sure, on whether you're
The borrower or not.

J. K. Kollock, blk 1, tax, \$6.30. Bennett Trust Co., in blk 2, lot 1. tax, \$3.15; lot 2, \$3.15; lot 8, \$3.16, lot 7, \$3.15. J. K. Kollock, in blk 4, lot 8, tax

\$3.15.

Bennett Trust Co., in blk 5, lot tax, \$3.94; lot 2, \$3.94; lot 3, \$3.34, lot 4, \$3.94; in bik 6, lot 2, tas. \$14.72; lot 3, \$7.56. Belt Line Ry. Co., in blk 6, S 1/2

lot 4, tax, \$7.09. J. K. Kollock, blk 7, tax \$15.75. James P. Morris, S 120 ft bik 7, tax \$3.15.

Bennett Trust Co., in blk 9, lot 1 tax, \$3.15; lot 2, \$3.15; lot 3, \$8.15; ot 31, 68c; lot 32, 68c.

K. I. Perky, trustee, in blk 38, lot 4, \$3.15; in blk 10, lot 1, tat.

1, tax, 68c; lot 2, 68c; lot 3, 68c; 'ot lot 4, \$3.15; in blk 11, lot 1, tax.

4, 68c; lot 5, 68c; lot 6, 68c; lot 17.

33.15; lot 2, \$3.15; lot 3, \$4.16; lot 4, \$4.15; in blk 12, lot 1, tax \$4.15; lot 2, \$4.15; lot 3 \$4.45; 68c; lot 3, 68c; lot 4, 68c; lot 10t 4, \$4.15; in blk 13, lot 1, fax. 68c; lot 6, 68c; lot 7, 68c; lor 3, \$4.15; lot 2, \$4.15; lot 3, \$4.15.

J D. Johnson, in blk 15, lot 1 tax, \$2.08; lot 2, \$2.08; lot 7, \$2.08;

F. A. Golden, in blk 16, lot 1, tax. \$64.33; lot 2. \$2.08; lot 3, \$2.03; lot 4, \$2.08; lot 5, \$2.08; lot 6, \$2.08; lot 7, \$2.08; lot 8, \$2.08. Frank Bowker, blk 21, tax \$8.30.

F. B. Watte, blk 22, less part sold Frank Bowker, parcel land described in Vol. 10, P. 297, line 1. of 1911 tax roll, tax, \$20.75.

Sheriff's Assessments for 1911. J. R. Good, in blk 42, lot 1, tax, 68c; lot 2 68c; lot 3, 68c; lot 4, 68c; lot 5, 68c; lot 6, 68c; lot 7, 68c; lot 8, 68c.

C. E. Houser, SW4/SW4, S. 2.

Twp. 20, SR. 11, tax, \$3.42.

Chas. Masters, und ½ lot 31, bix 68c; lot 8, 68c.

E. M. Lockhart, SW 14 NE 14, 1es-9 acres sold, S. 29, Twp. 28, SR. 1tax, \$15.12. C. W. Tower, S%NE%, S. 3, Twp. 26 SR. 14, tax, \$3.76.

That 6 months after such taxes ar. linquency will issue therein, as pratotal amount as penalty provided by law, interest at the rate of 1 per cen-c April, 1912, and the cost of publisa-

W. W. GAGE, Sheriff & Tax Collector, Coos County, Ore

EROPLANE ADVENTURES J.ARMSTRONG DREXEL

III.—The Physical Strain of Flight

J. ARMSTRONG DREXEL AND HIS BLERIOT MONOPLANE.

that I had not got these new planes

in time to test them out and become

Demoralized by the Strain.

this flight was totally demoralizing.

There was not a moment of certainty

in it, except the certainty of demoli-

tion if I relaxed my vigilance for an

instant, and with this thought upper-

most it was only natural that there

should be a reflex action that had its

physical effect, and I found myself

grasging my steering post with such a

tension that it became painful to the

It was like learning to fly all over

again, and I was the sole representa-

tive of my native country in the great-

est competition in the history of avia-

tion. My position might have struck

me as pathetic had it not been so dan-

For three circuits of the course I

fought that stubborn aeroplane, deter-

mined to conquer it and to make as

good a showing in the result as possi-

tell on my nerves. I found myself

warping when there was no need for

it. My arms jumped the steering post

about in a way that threatened de-

struction, and I fancied the Bleriot

was bucking when she was on an even

Again 1 went around the course,

hurtling through the air at a speed

that would have left nothing but splin-

ters if I had struck the ground, and

again the strain of those unfamiliar

and cantankerous little wings increas-

ed its evil effects upon mind, body and

nerves. Soon I found my brain abso-

lutely refusing to work, my nerves

jumping like mad and my arms, shoul-

ders, legs and back aching as though

Finally I came down thoroughly

tired out in every faculty and almost

Then I felt the strain begin to

finger tips.

gerous.

The mental and nervous strain of

accustomed to their vagaries.

records established today these three

become in a great measure interde-

pendent and inseparable. I mean by

that that when a man's brain becomes

tired his body becomes tired with it,

and that when his nerves are shatter-

During the trials in the Gordon

Bennett cup race at the Belmont park

meet, near New York, last October, I

had had built for my Bleriot a special

set of racing wings. They were the

smallest surfaces it was possible to

fly with even at the maximum speed,

and were made with as little span

from tip to tip as was absolutely nec-

essury, so that there should be the

On the day when the Gordon Bennett

trials took place I had had these little

wings put on. I had never flown with

them, but I knew that it would be use-

less with the regulation sized wings to

try to compete against the two 100

horsepower engines that were entered

because mine was only a fifty horse-

power. So I had to trust to luck that

The Greatest Danger In Flying.

In flying an aeroplane the greatest

danger comes from the constant tend-

ency of the machine to tip over to one

side or the other. A gust of wind, a

movement of the aviator's body-any-

thing and everything tends to throw it

off its balance, and the minute it be-

cins to tip downward on one side it

There are two ways of doing this, A mechanism is provided by which

the rear edges of the ends of the

planes can be pulled down a few

inches, thus offering on that side where

this depressing or "warping" is done

consequently developing a greater lift-

ing power. When the right wing is

a greater impact against the air and I had been beaten with a club.

"warped" or pulled down at its rear | unable to walk, though I did manage

everything would go right.

houst be righted.

smallest conceivable head resistance

when the machine was in motion.

ed his body and brain give way too.

All rights reserved.]

AN has invented nothing that looks so gracefu! and so easy as an aeroplane in flight. Skimming overhead. with broad, outstretched wings and with no effort apparent in any part. so far as the beholders can see, the aviator sitting calmly in his seat seemingly doing nothing but enjoying himself, this modern air craft looks to be the very acme of comfort, of ease, of exhilaration.

Yet a few hours in the air in an aeroplane is the hardest day's work that any man can do.

What is there hard about it? What is there for an aviator to do or to endure that should make it comparable to labor? The man who races an automobile knows something of this strain. But he has only one method of steering to engage his attention. He sends his machine to right or left and that is all there is to it. The avlator must constantly be in control of three sets of apparatus, and a momentary neglect of any one of the three means wreck. He must steer up and down, to right or left, and must keep his horizontal balance in the air.

Three Kinds of Strain In Flying.

Roughly, the strain of flying can be divided into three kinds-the physical. the mental and the nervous. With the man who attempts to break any of the

[Copyright, 1911, by Henry M. Neely. edge it makes the machine rise on that Copyright in Great Britain and Canada. side, and the mechanism at the same side, and the mechanism at the same time pulls up the rear edge of the left plane, thus lessening the impact on that side and causing it to fall. It is in this way that the aviator controls his balance, warping his wings as he dips one way or the other and keeping himself on an even keel. After he has become thoroughly experienced he learns to balance without warping under ordinary conditions, for it has been found that steering the machine toward the high side brings it again to the horizontal. Then he uses the warping devices only in emergencies.

On this day at Belmont park the wind was nasty and gusty, and I was in trouble at the very start. The extremely small breadth of the planes, I found, gave me practically up horizontal support, and, though I kept steering first to one side and then to the other as the machine carconed over dangerously, I found that this simple method of righting my balance would not suffice. I had to keep warping my wings to their utmost limit. and not for one moment did this necessity cease.

In the seven laps of the course that made I cannot tell how many times I felt that I was turning over in the air. Almost momentarily I felt as though I must go cracking to the ground below, for try as I did I could not get an even baiance on the little planes for any length of time.

It was a totally new experience for me, and I regretted more than once

to brace myself up to pass the scrutiny of the onlookers about the hangars.

In this case the entire breakdown was the result of nervous strain. Yet Cying can impose great physical strain without reference to nerves or mind. Those who go in for endurance records are subject to this, and those of us who have made climbing for height a specialty know the terrors of physical fatigue which is purely muscular, but which has the mental and nervous element added to it.

Strain of Endurance Flights.

I have seen men crawl down from their neroplanes after a long flight and have seen their friends rush up to them to shake hands in congratulation for a noteworthy feat. And I have seen the hand dropped at once, for it could not respond to the grasp that was given it. There was no life in it. It hung limp, inert, powerless and feelingless from the fatigue of gripping a lever with little or no change of position for so long a time.

Yet endurance flights such as those made for the Michelin trophy and prize are flown over good courses, learly marked by pylons or posts, and almost invariably over good grounds that provide safe landing places at any time. In this way there is as little as possible of nervous and mental strain. Otherwise such flights as that of Henri Farman, who stayed up over eight hours, would be impossible.

When these long flights are made across country the nerve and mind enter into the equation against the man. He faces uneven and probably broken land unfitted for a quick decent if anything goes wrong, and he frequently flies across country that is unfamiliar to him, and that keeps him in a mental uncertainty that adds a great deal to the physical fatigue he has to suffer.

The Greatest Strain of All.

Those of us who are foolish enough to climb for height have all of these torments infinitely multiplied, and, added to them, we face conditions that are not met with in the ordinary work closer to the ground.

To most people the strain of altitude climbing appears to be only a matter of enduring the rarefied air met with a couple of miles above the earth, but the big torture comes with the sudden descent-with the rapid change of pressures as we drop a thousand feet n minute or more-and this is indeed a torture long to be remembered.

In the early days of my altitude elimbing, when I set the world's record at Lanark, Scotland, I kept fighting for each extra inch as long as there was any strength or endurance left in me. I struggled at the top until it was useless to struggle any longer, and then, with all my strength gone, there was nothing for it but to fall back to earth with my aeroplane pointed as sharply toward the earth as safety would allow.

When the Head Feels Like Bursting.

I came down like a thunderbolt. As the descent began the pressure began to change rapidly with my entering into heavier and heavier strata of air, and I began to feel pains in my head and ears. These pains got worse with every second of the descent, and when I was within bailing distance of the earth I felt as though something, inside my head would surely burst with the awful tightening about my ears and temples. I can appreciate now the tortures suffered by medieval martyrs who had bands of iron gradually tightened about their heads. The recollection of that descent at Lanark makes me sympathize with them pro-

At Philadelphia last November I rose more than 5,000 feet higher than at Lanark and I fell faster on my descent to carth, but while my sufferings were intense they were not so great as in Scotland, for I had been told of a method of counteracting the increasing pressure and used it with great success. I had shortly before this been talking to Clifford B. Harmon about some of his ballooning experiences and had asked him if he had ever suffered during rapid descents as I did at Lan-

"I did quite frequently in my early days," said Harmon, "but Captain Baldwin told me a way to avoid it." "What is that?" I asked.

"Swallow-swallow constantly," said Harmon.

So on this plance from the clouds above Philadeiphia, when my nerves were racked to pieces and my physical faculties were utterly worn out, I suddenly thought of this scheme when the pressure became painful on my ears, and the relief was immense.

Effect of an Hour In the Air.

An altitude flight of this kind does not last long according to the time of the watch. It seems ages, but my barograph record for my highest climb, 9,897 feet, showed that it took me just about fifty minutes to reach the maximum altitude. It could not have taken more than four or five minutes to descend, but my plunge was so rapid that the ink could not flow fast enough from the style of the instrument to record, so I cannot tell exactly.

Assuming that the total flight from the time of starting to the time of Inding occupied one hour, the physical strain of such work can be imagined when I say that I started in fine condition, fresh and feeling strong and equal to unything, yet when I landed in that empty field at Oreland, fourteen miles away from my starting point, I was so utterly worn out and helpless that I could not elimb out of my machine for

several minutes. The next time any of my readers sees an aeroplane soaring gracefully. sloft let him remember these things and be satisfied to stay comfortably on the ground until flying is made a good deal easier and a vast deal safer than it is today.