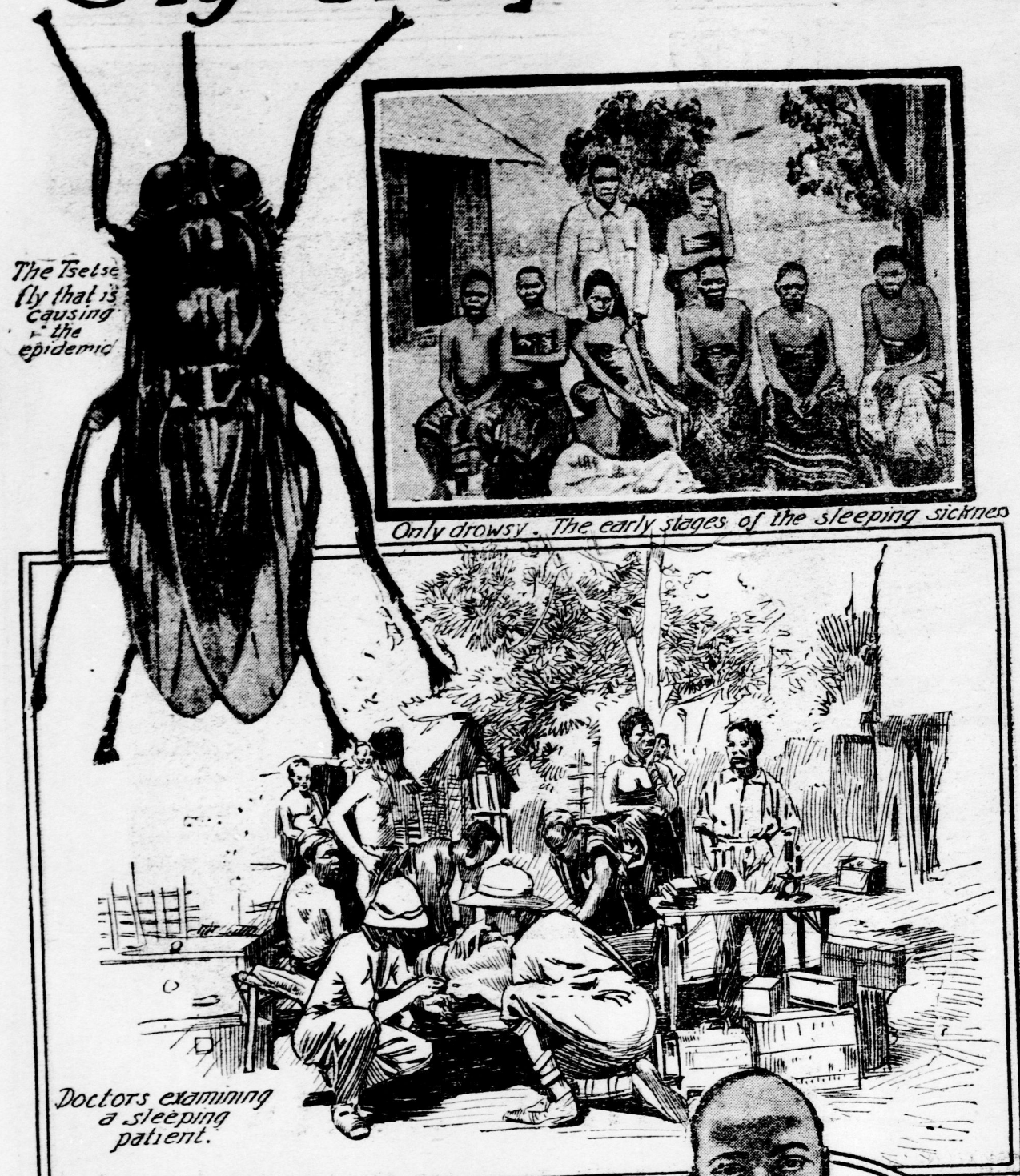


# An Epidemic Worse than Cholera. 200,000 Victims of the Tsetse Fly Sleep to Death



A scourge more deadly than cholera, the fatal sleeping sickness—a sleep from which the victim never fully awakes—is threatening to depopulate large portions of interior Africa. At any rate, it is a very serious menace to plans for the colonization of that country, and all the troubles is due to a fly.

Already the sleeping sickness is known to have caused more than 200,000 deaths; one can only conjecture how many more natives have fallen victims to it in the comparatively unexplored interior fastnesses.

In the Jingo community, Ripon Falls, alone, 30,000 deaths have resulted, and many islands in the Victoria Nyanza are swept clear of inhabitants.

The epidemic of sleeping sickness is more deadly than cholera, for the reason that its victims never recover. There is no known remedy.

Its deadly germs are implanted through the bite of the tsetse fly, well known to all African travelers. That the fly is fatal to humans, but, until recently, human beings were supposed to be immune.

The present outbreak began only three years ago, and in that time the disease has claimed victims equal in number to the entire population of Louisville or Minneapolis.

A few weeks ago Emperor William and a distinguished company of German scientists and statesmen listened to a lecture by Professor Robert Koch, who had been investigating the sleeping sickness for several months.

They were particularly interested because the terrible pestilence threatened the extinction of the natives and settlers in Germany's possessions in the Dark Continent, and will, doubtless, interfere seriously with plans which have absorbed great sums of money and which promised a fertile field for German enterprise and capital.

While Professor Koch asserts, the disease has been known on the west coast of Africa since the beginning of the last century, its ravages appear to have become widespread and alarming only of recent years. It is sweeping the interior with the fury and resistless power of a prairie fire.

On the shores of the Victoria Nyanza the scientist found whole villages emptied of their inhabitants and overgrown with weeds. Some groups of islands, formerly well populated, now have not a single inhabitant.

Near Ripon Falls an entire community, numbering as many persons as Canton, Ohio, or Montgomery, Ala., disappeared.

For a considerable time a tsetse fly was found to be fatal to natives, it was supposed that Europeans were immune. In three years, so far as known, only four Europeans have died.

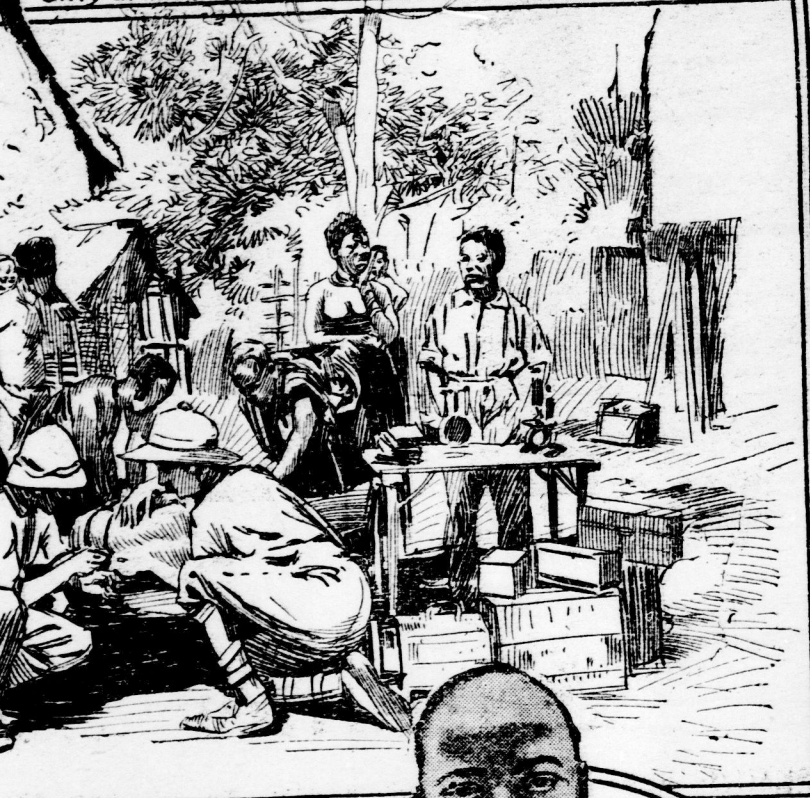
## ENGLISHMAN A VICTIM.

A few days ago, however, it was announced that Lieutenant Tullock, who had accompanied the English Royal Society's commission to investigate the disease in Uganda, had contracted the sleeping sickness while dissecting an inoculated rat. He is now on his way to England, and it is feared he cannot recover.

Some months ago, Sir Claude de Creigny, writing from German East Africa, stated that he had visited



Only drowsy. The early stages of the sleeping sickness



Doctors examining a sleeping patient.



Second stage. Just possible to keep awake.

the sleeping sickness hospital at Entebbe. He found a dozen patients there, one of them a German.

"The disease," he stated, "is conveyed by the tsetse fly; only 2 per cent., however, disseminating the fatal germ. At present it is doubtful whether the disease emanates directly from the fly or whether the latter conveys it from dead fish."

At the hospital forty monkeys were inoculated, half of them dying within two months, the remainder being considerably emaciated before they died.

The tsetse fly bites all warm-blooded animals, but seems particularly attracted to horses and cattle. It is larger than the ordinary house fly, and is related to the stable fly.

Regions about water courses and lakes form its principal habitat. Since settlers from the coasts began to push into the interior, the fatality of the tsetse flies bite to horses has been known. There are large portions of Africa in which the horse is never seen; it cannot survive because of these dangerous insects.

It was some time before the fact became generally known that cattle also fell easy victims to the fly. Settlers and explorers, trekking into certain latitudes, with wagons drawn by strings of oxen, found their animals died by scores upon reaching certain stages of the journey.

Even then, it was a considerable time before blame was laid upon the pestiferous tsetse, and trekking parties setting out for interior journeys generally expected to lose a part of their motive power from the mysterious "cattle disease."

When the liability of cattle to infection was realized, the belief became general that donkeys were immune from the fly. They passed through regions infested with the insects, and apparently escaped harm.

## EVEN DONKEYS SUCCUMB.

It was noticed later, however, that while animals might go a month or more after being bitten, great mortality among them followed every rain. In skinning the dead animals the flesh in certain places was found to be streaked with yellow—the tsetse poison again.

Even more deliberately do the poison set up its fatal work in the

human system, although, when it once takes hold, only death, so has loosened its clutches. Cases are known where the disease was five years in developing.

In whatever locality found, or under whatever name, the sleeping sickness always presents the same symptoms in man.

For several days, or even much longer, the person bitten remains in usual health. Then the victim gradually loses his animation, becomes morose, has a tendency to speak of himself and coaxes to speak without being urged, while his eyelids close, and cannot be kept open without considerable effort.

Fever attacks the sufferer; when he speaks he is incoherent; the glands become swollen; the patient is emaciated and passes steadily into the grip of overpowering sleep. Somnolence is almost constant, but is usually slight, so that a call suffices to arouse the sleeper.

Nothing can restore him to animation. The general states becomes more and more aggravated; bodily functions are badly deranged; at last profound sleep wraps the victim in its fold, and the sufferer imperceptibly passes from life to death.

A German scientific expedition, sent out by the Minister of Public Instruction and the Colonial Institute of Medicine and headed by Dr. Brumpt, and an expedition dispatched by the British Royal Society, have been making careful investigations of this disease, while Professor Koch spent several months making individual researches.

It was a considerable time before any European was known to be attacked, but recent evidence from the infected districts indicate that the white man can no longer be considered immune.

That so few have fallen victims to a scourge that has carried off natives by the thousand may be attributed, probably, to their more intelligent manner of living and the precautions taken. Most Europeans in that country sleep under mosquito netting and endeavor to protect themselves in other ways.

It is the general opinion of scientists who have investigated that the tsetse fly does not originate the disease, but spreads it as yellow fever quitoes.

It is the belief of Dr. Koch that

the sleeping sickness, which is a kind of cerebro-spinal meningitis, has been known on the west coast of the Dark Continent for nearly a century. The tsetse fly was undoubtedly prevalent in the interior and other portions of the land at that time.

Before the European conquest of Africa, the interior of the country was populated by hundreds of separate tribes, each with its distinct territory. They were almost continually at war with each other.

In consequence, there was little interchange of commerce or visits, and no clan ventured far from its native hills or valleys.

Therefore, persons afflicted did not spread the disease by going into distant territories.

When the advanced guards of European settlement took hold of affairs in Africa they brought up these series of intercommunal wars, sometimes on-shoring the petty kings in doing so.

Peace then prevailed over vast regions, the tide of commerce began to flow and great industrial enterprises were set on foot, giving employment to many of such natives as chose to work.

When the blacks found that they could roam at will and in safety, thousands of them began to do so. Some of them were engaged in trade, others offering their services as boatmen, porters, soldiers or laborers.

In this way the sleeping disease spread. Migrations carried it to the heart of Africa, where the tsetse fly is most numerous.

European settlers, too, working further and further inland from the coast, have pushed the black man before them, much as the American Indian was displaced; while internal improvements, like railroad and highway building, and various industrial enterprises have strung armies of workmen through the forests, jungles and valleys of the interior. There the tsetse fly flourishes.

## CENTRES OF INFECTION.

Centres of infection are the region of Loango, the right and left banks of the Congo as far as the Belgian station of New Antwerp, and those of the Oubanghi as far as the height of Banghi. There the disease is endemic. It has also ascended the Kasai and reached the Manyema and Ouganda.

Even Upper Egypt is threatened, as is also English Eastern Africa. There is no foreseeing where the terrible disease will stop. It attacks the Arab and European, as well as the native African; there seems to be no immunity of race.

A convincing argument in favor of the theory that the disease is conveyed by the tsetse fly is that it never secures a foothold where that insect does not exist. It has been carried to the Antilles, but died out with its victims—there were no tsetse flies there.

The insect swarms along the rivers of Africa, and boatsmen and travelers are constantly exposed to its sting. Indeed, it stings ten or more persons before it becomes satisfied and settles down to suck the blood of one.

Professor Koch hopes the disease may be eradicated in time by the careful and persistent slaughter of the tsetse fly. Extermination, it and the terrible infection will cease, he thinks.

As a means of accomplishing such an end, he suggests burning the underbrush at the favorite haunts of the fly. Fortunately, the insect propagates slowly. It does not lay eggs but multiplies by producing, one at a time, full-grown larvae. The perfect insect appears six weeks later.

In the illustrations a group of negroes suffering from sleeping sickness is shown. One of them, a young woman, has fallen asleep while awaiting the adjustment of the camera.

The single figure is that of a woman who has reached the last stage of physiological suffering. The stupid expression of her face, the general lassitude manifest, and her indifference to everything about her show that she has but a short time to retain the wakefulness of life.

One of the more important considerations of its menace to human life, the scourge threatens the vast colonial undertakings of nearly all European countries, English, Belgians, French, Italian, and Portuguese, and others, all of whom are engaged in the extension of settlement and trade.

The disease makes the economic future of Africa problematic. Such an insignificant thing as a fly may stay or roll back the march of the world's civilization and progress.

## A LETTER THAT'S UNIQUE.

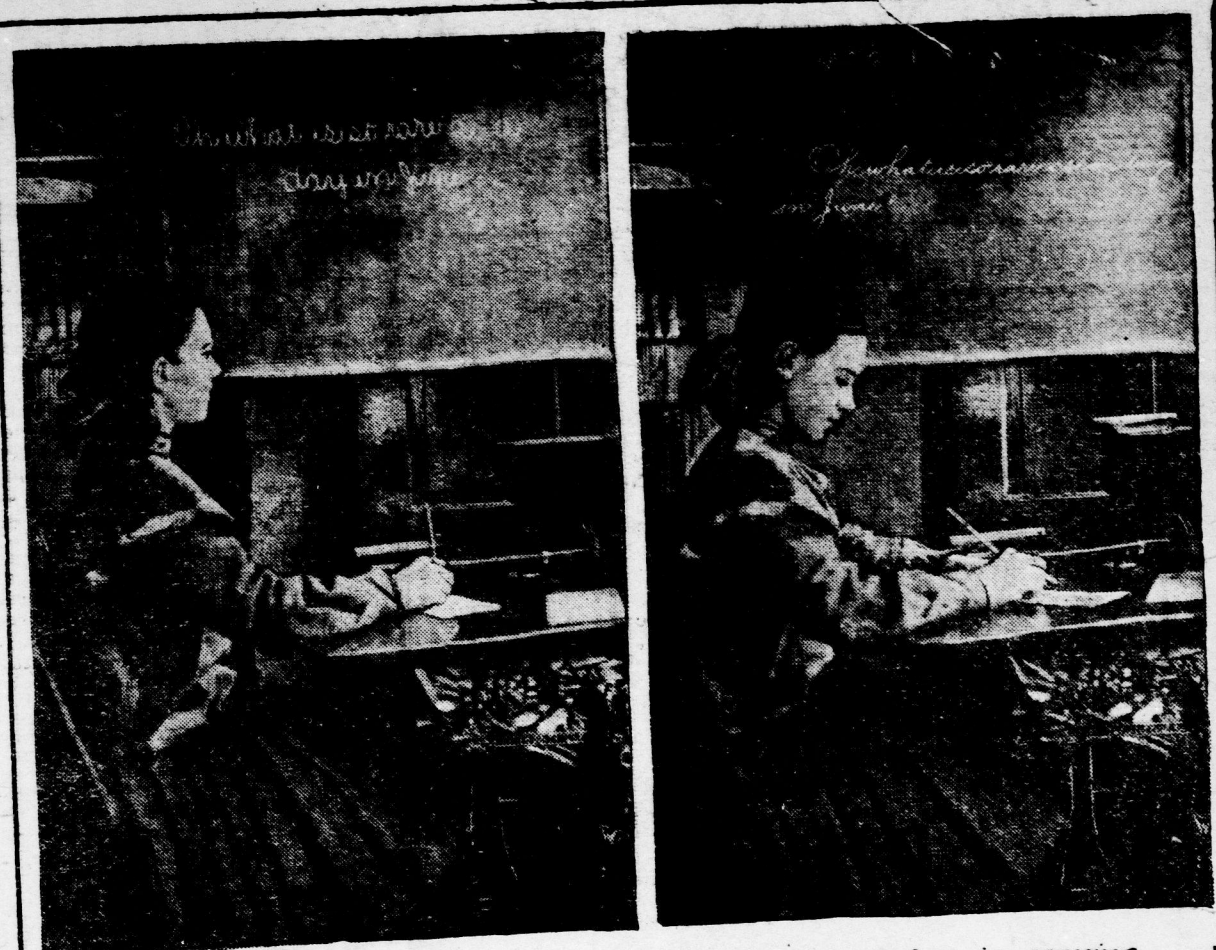
Perhaps it may all be a slander upon the poor woman, but it is said upon the following letter, published in the following letter, published in a Milford, N. Y., paper, was actually written by a widow to thank her friends for their kindness at the time of a recent bereavement:

Mr. Editor:—I desire to thank the friends and neighbors most heartily in this manner, for the united aid and co-operation during the illness and death of my late husband, who escaped from me by the hand of death on Friday last while eating breakfast.

To the friends and all who contributed so willingly toward making the last moments of my husband a success, I desire to re-bow most kindly, hoping these few lines will find them enjoying the same blessing.

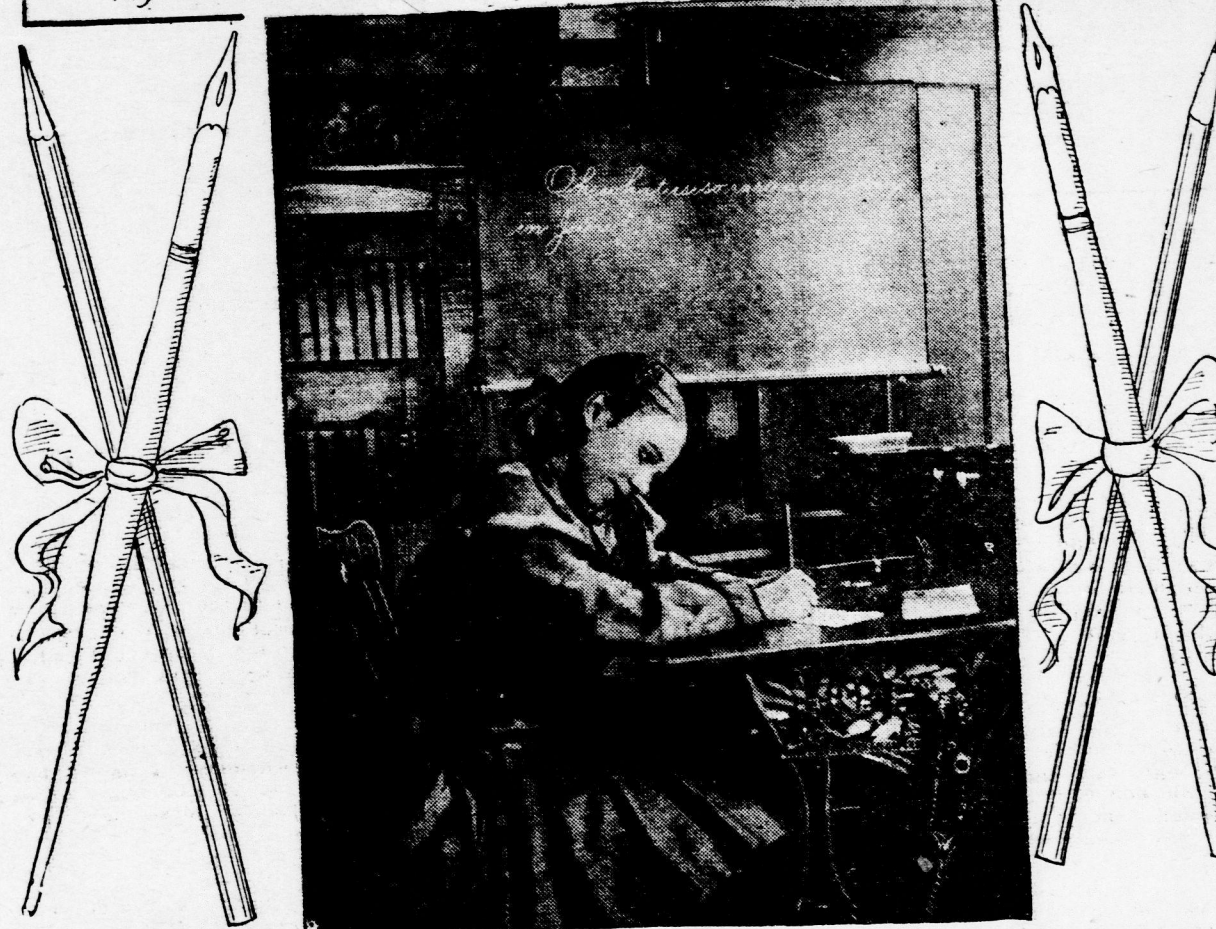
I have also a good much cow and roan gelding home, which I will sell cheap. "God moves in a mysterious way His wonders to perform." He plants His footsteps on the sea and rides upon the storm"; also a black and white shote very low.

# VERTICAL HANDWRITING SAVING THE EYES OF CHILDREN



An easy, restful position in copying vertical handwriting

Correct position in copying "Slant" handwriting



The injurious position usually assumed by the "Slant" handwriter.

Danger of blindness—or, at least, serious eye trouble—lurks in the old style of handwriting, or the slanting letters. Therefore, they must give place in the schools to the vertical style.

Such a conclusion was reached at a recent convention of the health committees of the Boards of Education of large cities. After prolonged discussion and the submission of the views of oculists, the "straight-up-and-down" letters won the day.

The strongest argument in favor of vertical penmanship was that it is easier on eyes and nerves than the fine line, slant writing. Oculists asserted that the number of cases of astigmatism among school children would be lessened, at a low estimate, 65 per cent. were the vertical hand universally adopted.

A test made at the convention proved that vertical letters could be read by 78 per cent. of those present at a distance of seventy-eight feet, while 60 per cent. failed to decipher a Spencerian exercise at twenty-five feet from the chart.

Among the arguments advanced in favor of a retention of the old style of penmanship was that the delicate Spencerian hand was more "gentle" than the bold, round, businesslike upright letters.

"It may be more general," remarked a prominent oculist of Harrisburg, Pa., "Maybe it is more aristocratic also to go peering through plate-glass lenses attached to a gold chain than to view the world with directness through normal eyes, but it's less convenient and more expensive. More children have their sight injured, and are given 'casts' for eyes, by being obliged to copy that same 'gentle' slant writing from charts hung about the school room than from any other one cause."

The trouble begins in the kindergarten, where the tots are taught their alphabet, and it dogs them through the higher grades, and even follows them into the colleges.

Copying the slant style of writing from the blackboards is the chief evil, experts assert, strain on the eyes being felt by the pupils, no matter in what part of the room they may be, except, perhaps those quite near the board or chart and sitting to the right of it.

Because of the thinness of the strokes, pupils sitting in the rear of the room find it very difficult to decipher slant writing, and those sitting to the left of the exercise are obliged to change the focus of their eyes with every line they read, and also with every one they write.

The extent of this difficulty and the strain such work imposes can be appreciated only by a trial. The test suggested is as follows: Take a child's blackboard or hanging board, write several lines of post-

ry upon it in the delicate slant hand, making the impression as heavy as you can to be consistent with the style, and then hang it at the back of the room.

Stand to the left of the board, your eyes looking in the same direction as the slant, and with your chair squarely in front of desk or table, your paper directly in front of you, slanted at an angle of about 25 degrees toward the left hand. Then make several copies of the writing on the board.

## TEST IS CONCLUSIVE.

Such a test, experts assert, will convince any one that children, if they attend schools where this style of penmanship is still in vogue, are straining their eyes. Remember that a distance of twenty-five feet is one-third the size of the schoolroom; thus you have had three times the advantage of a pupil in the rear of a schoolroom.

There is more that is harmful in the old-fashioned hand than the angle of the letters, it is charged. One of the rules of this style is to commence the second word close upon the heels of the first. The rule reads: "Drop a straight line down from the last letter of the word just written, and commence the first letter of the next word touching upon this."

By following this rule no appreciable spaces are left between the words so that a distance of twenty-five feet from the slant writing appears, a hyphen or two between the syllables. A pupil must either be familiar with the exercise or have an intuitive mind to be able to copy a lesson from this distance without straining her eyes.

Next comes the subject of shading as generally practiced in the Spencerian style. The rule is: "Up strokes light, down strokes heavy." When this is followed, the effect is most bewildering to the eye, and is very injurious. A manuscript or a blackboard exercise shaded in this way is scarcely legible. If only the fine strokes, made with a pointed pen, are employed, the appearance of the paper may be neat and attractive, but the eyes will soon become weary.

In one of the tests made at the convention it was shown that the eye grows tired after an hour's reading of the old-fashioned hand, whereas no discomfort is felt at the end of three hours' perusal of a manuscript written in the vertical style.

## NO BEWILDERING FLOURISHES.

"As plain as print," a comment often made upon the vertical style, simply means that the letters stand straight in soldierly dignity; that they are shaded uniformly, and that there are no bewildering flourishes, which seem to be the pride of the skilled penman of the old school.

There is something to be said about the discomfort of the hand and body

in writing anything of length in the slant hand. Being obliged to use a hard, sharp-pointed pen and to grasp the penholder with the thumb and first finger at a very trying angle, the muscles of the wrist soon become weary and cramped. The result is writer's paralysis, if the one employing this style is obliged to keep at his task after his muscles give warning. For the vertical hand the following rules are given:

Leave the space of a full letter between words. Make every stroke heavy and of uniform shade. Give every letter the bold, clear effect of type. Every letter should be formed so that if a line were dropped through the middle of each one it would form a vertical line to the bottom of the page.

Each word should be ended with a straight upward stroke. There must be no flourishes or unnecessary lines of any description.

A person employing the vertical style can use a soft-pointed stub pen which is easy on the muscles, and he can carry the penholder lightly between the index and the second finger, using the thumb as a guide, thus putting very little strain upon the muscles of the wrist.

The child in the schoolroom, when studying the old style, is told to sit squarely in front of her desk, the paper on a "gentle" slant, and the pen held with the penholder pointing over the right shoulder. The little finger and the one next must rest lightly upon the paper, and the wrist must result in cramp of wrist and fingers. The writer is supposed to sit with head tilted only slightly forward, shoulders back and the feet firm upon the floor.

Use of the vertical style enables the writer to sit in comfort and still to maintain a position which does not cramp the lungs or round the shoulders.

All this has been quoted to show the advantage to the pupil of the vertical hand over the slant. For the marking of examination papers would lose half its weight and cause 90 per cent fewer headaches if the papers were written in the vertical style.

We do not anticipate any Spring boom in Giveadam Gulch this spring. The average number of drinks per day per citizen is six, and until this number is increased things will continue to run along as they have.

In making a land deal the other day we became possessed of three more mountains and four more precipices, and we can now fill all orders without delay. Please mention what height of mountain you would like, and whether you want a dreadful precipice or only an ordinary. No extra charge for a mountain which gives off avalanches occasionally.