LAST OF THE CLIMBIMG SWEEPS.

The Death in London of the Sole Representative of The Vocation.

A few days ago, at the age of 72, died in Shoreditch, London, one William Price, said to be the last of the 'climbing boys.' So much the papers recorded and went their way with other paragraphs of more importance. But the 'last of the climbing boys' should be a figure of historic interest greater than the 'last of the barons,' and if London has half the poetic sentiment some of the writers claim for her there will be a monument set up somewhere to the typical memory of this same William Price, the last of the sweeps Any careful reader of Dickens knows of the horrors of an institution that existed in London until considerable less than half a century ago; but only one who has taken the trouble to delve in the dust-covered lore of the old town can have an idea of the peculiar and not wholly evil nature of that institution. Doubtless there are veterans yet far from senile who remember what a mighty struggle there was to secure legislation against the employment of boys to climb chimneys; the benevolent efforts in this direction being, for a long time, frustrated by the plea that chimneys could be cleaned in no other way.

It was incontestably true of the chimneys of old London. As was very sagely said by a master chimney sweeper at a May Day banquet of the fraternity, 1826, when he defended his trade: 'Look at the Duke of York's fifty-one new chimneys—most of them run in a horizontal line and then abruptly turn up, so that you see a machine would be of no use, than if you were to thrust up a broomstick And who dares to say that the United Society of Master Chimney Sweepers are not as respectable a body of tradesmen as any in London? There is not a gentleman now present who has not made his way in the profession by climbing up chimneys.' Notwithstanding this speech the 'profession' was a barbarous one, the tortuous construction of chimneys making it impossible that any but the smallest boys should crawl up them, a feat performed by setting the back against one side and bringing the knees up against the opposite wall, and so, by mere pressure, inching the way up the narrow soot-choked hole. This sort of climbing lacerated the flesh and often tore it from the knee and shoulder joints of the miserable lads who were actual slaves under the old apprentice laws that bound them helplessly and hopelessly to their masters Often these boys entered upon a task with their knees and backs and hands already raw and sore from a previous day's torture, and the agony they endured was only alleviated by the thought of the greater and more brutal suffering they should have to endure if they attempted to evade their task.

Now and then a lad, as often perhaps through accident, became lodged in a narrow part of the chimney and breathed out in brief terror, his wretched life. When, however, a sweep had completed his task and reached the chimney vent he thrust his hand through, and a grin of triumph on his soot blackened little face, waved his brush of victory as he shouted to the passers in the street. Occasionally a nimbler monkey than the average would wholly emerge and seat himself on the chimney's edge to amuse with his antics the gathered crowd below. Into the dreariest and most ghastly lives leisure hours and the world's cheer filter some particles of gladness, and the climbing boys were permitted to taste the humanities once a year. A lost child of the house of Montague was recovered in the rags and grime of a sweep into which fate had betrayed him; and in her gratitude the elegant Mrs Montague annually entertained at her mansion in Portman Square all the climbing boys of London. This she did to their joy as long as she lived. Roast beef, plum pudding and a shilling she gave to each lad. And on the return of the fair of St. Bartholomew to Smithfield annually, James White, a friend of Charles Lamb, gave a sweeps' dinner, at which he officiated as head waiter.

May 1, too, there was a pageant of sweepers, headed by their 'lord and lady,' magnificently bedight, he with huge cocked hat and yellow feathers, full dress coat, embroidered waistcoat, satin 'shorts,' silk hose, dancing pumps, in one hand a light cane, in the other a handkerchief; she (generally a boy in female attire) gaudily dressed to correspond. They would parade the streets and dance about an ivy cone that quite enveloped a man, the whole company, oddly dressed and beriboned, joining in the festivity. The 'lady' would then pass among the crowd with a silver ladle, which she reached to each spectator for contribution These ladies were not infrequently heirlooms that had come down through generations of sweepers in the same family groove 'Here come the sweeps,' was the signal that stopped the pedestrians for a half-hour of sport, for the sweepers were artful in their entertainment, and were worth the pause But there were fantastic respites in the hideous experiences of the year, and England became humane enough at last to pass a law against the employment of climbing boys, and that necessitated the tearing down of old structures and the substitution of the modern chimney that may be cleaned with a 'scandiscope,' the hollow, jointed brush of the unromantic sweep of the present day.

The contemporary chimney sweeps who still are of importance to London are lusty youths and mature men, who work with a 'machine,' and bear relation to the ancient order commiserated by Lamb and purposefully championed by Dickens only in their soot-grimed hands and blackened countenances. One of these, testifying at the inquest over William Price, summed up the grand difference between original worth and present degeneracy. 'Lor' bless you, we ain't chimbley sweeps nowaday. Not a bit of it. We work with a lot of sticks. Anybody can do that But—ah, he wor a sweep, he wor He could do our work, but we couldn't do his. Thare ain't no chimbleys and there ain't no sweeps now.'—Chicago Record.

FLOYD'S WONDERFUL FIRE.

A Paste Which When Once Ignited Nothing Can Put Out.

There is a fire that never dies, and it is here, and in this world, too. This strange fire is of the consistency of paste, and is harmless while in a quiet state. The friction caused by rubbing it against a hard surface will, however, set it aglow, and nothing will extinguish the flames, which will burn with a blue light and an intense heat until the compound is completely destroyed by combustion. Water has no effect upon it; it can be made into balls and thrown anywhere, and it will burn with a slow but fierce combustion which makes it unlike any known fire.

Dynamite and gunpowder requires a spark to ignite them, and powder produces an explosion, not a regular fire. To ignite this compound there is just the slightest friction of rubbing it against some ordinary substance. There is no explosion or rapid spreading of flames, but a strange, pasty substance composed of living fire, which cannot be stamped out or killed in any known way.

John Floyd, the discoverer, has been for several years delving in all sorts of chemicals, as his numerous inventions required constant study. One day he wished to make a certain substance with which to experiment, and for that purpose placed in a liquid some waste substance which he thought would, when dissolved, produce the wished-for-compound. But he found the material he wanted before the liquid was dissolved, so he left the jar containing the solution on the shelf for several weeks, thinking no more about it.

Finally he thought of using the jar and, when lifting it down from the shelf, some of the liquid spilt on the floor. Mr. Floyd thought nothing about the matter till he noticed a sentation of heat about his foot, and on looking down found that the soft paste which had fallen out of the bottle had become a mass of soft, flickering flames emitting an intense heat. He put his foot on the spot, stamping it out as he thought, and turned to his work.

When he turned again he saw that instead of going out the fire paste was steadily burning, that his rubbing it had only smeared it over the floor, and it was eating into the wood every moment. He then threw several buckets of water on the stuff, but the water had no effect other than to be converted into puffs of steam, and the fire burned steadily on, cutting its way through the soft pine flooring. As the experiments were being conducted in the back of a drug store, which was filled with dangerous chemicals, he knew that something must be done to put a stop to its ravages or the whole place would be blown to atoms.

After many fruitless attempts to put it out he procured a hatchet, and it was only by cutting out the entire square of wood on which the paste rested that he succeeded in stopping the fire, which burned out at least an hour.

Afraid of the uses to which this discovery might be put, Mr. Floyd has never made the secret of the ingredients public; but he says that the cost of making it is so small that it can easily be used instead of the cheapest waste materials And for that reason he will not let the formula become known, for incendiaries would take advantage of it and no place would be safe from burning. Those who use oil or dynamite or powder can be easily traced, as some preparation is necessary, but with this liquid fire a criminal who knew its composition could burn his way noiselessly through any door or set any house on fire by throwing against it a noiseless ball of the composition.

The cost of making this liquid fire is so small that it can be easily used instead of coal in heating a furnace. But the most valuable properties are those which it possesses which are absolutely foreign to those of fire as known to us. All forms of heat, except that of electricity, must be generatad in some kind of a furnace and be constantly supplied with fuel, but this fire is both flame and fuel itself About a cupful can be set on fire and it will burn with a steady glow for an hour.

This wonderful fire can be utilized in the kitchen, and stoves can be dispensed with altogether as entirely useless. In order to fry anything it is only necessary to hang the pan from a wire and smear over the bottom with a spoonful of the liquid. In an instant there will be a hot fire which will burn for over an hour. So that the cook of the future can take her fire out into the country; it can be used in cooking in camping; there will be no coal bills, but the work of heating furnaces, of burning fires in grates, or running motors can be done by a harmless little spoonful of paste, which can be taken around in the vest pocket

Of its practical uses there is no end, for the subject is yet in its infancy, the inventor, thinking but of the harm that might come, having stopped his experiments. He, however, says he intends to resume them and find out more about this explosionless, noiseless, unquenchable paste, which is fire pure and simple.—Cincinatti Enquirer.

BRUTE ARITHMETICIANS.

Examples Showing That the Dumb Animals Know Something of Numbers.

One day the celebrated ornithologist Audubon came out of his cottage with four of his friends to go for a walk. The next instant they saw a parrot fly in at a window. Audubon and of his friends returned indoors, and immediately the bird flew out in a fright and went circling about overhead. Audubon came in again, but the bird refused to reenter and the other gentleman had also left the house. It seemed to remember that two persons had gone in and only one had come out. Curious to discover how far the parrot could count, he returned indoors with his four friends, and made them go out one at a time, while he himself remained inside. In a few minutes the bird flew in again. It was evident that its powers of arithmetic ended at the number four.

A Russian doctor, named Timofieff, tried the same sort of experiment a few years ago with birds, cats, dogs, and horses. He declared that the crow is capable of counting as far as ten, and is in that respect superior to many tribes of men in Polynesia, who comprehend hardly anything of mathematics. Dr. Timofieff's account of the behavior of his own dog is amusing. The dog never buried several bones in one spot, but always hid each one away separately. One day his master presented him with twenty-six large bones, which he immediately proceeded to bury in twenty-six different places. On the morrow Dr. Timofieff did not feed the animal at all. In the afternoon he let his pet out into the garden, and from a window watched him intently. The dog set to work at once and dug up ten of the bones. Then he stopped and seemed to reflect for a moment, and began digging again until he had found nine others. Here he stopped to consider as before, and then returned to work, scratching perseveringly unlil he had unearthed six more bones. This seemed to satisfy him. He sat down and began his dinner. Susdenly he raised his head, stopped eating, and looked around with a thoughtful air. Then, as if quite sure that he had forgotten something, he started up, trotted around the garden, found the twenty-sixth bone, and returned with a look of satisfaction to his meal. The Doctor believed that the number twenty-six was too much for the canine mind to grasp, and that the dog had therefore divided the provender into three groups, counting the bones in each lot separately but that the mental process was so complicated that he had made a miscalculation, and only rectified it after reflection.

The same writer tells us that the cat is less expert in arithmetic than the dog not being capable of counting further than six He used to hold a piece of meat to his cat's nose and draw it away suddenly, always repeating the action five times before allowing the animal to take the morsel. Puss soon grew accustomed to the performance, and waited with dignity and calmness until the sixth offer was made, when she sprang up and seized the piece of meat with her teeth.

For some weeks the doctor repeated this experiment, and the cat did not make a single mistake. When, however, he tried to increase her knowledge by making four more approaches and retreats before letting her take the meat, she lost the count completly and jumped at the wrong moment.

Proofs of the horses power of counting are even more curious. Dr. Timefieff mentions a peasant's horse, which, when working, invariably stopped to rest after the twentieth furrow. It did not matter how long the field happened to be, nor how tired the animal might feel, it never stopped until the twentieth furrow had been made, and so exact was the count that the farmer could tell the number of furrows by noting how many times the horse had halted.

In another villdge there was a horse which reckoned distances by posts, and knew what hour it was by the striking of the clock. Dr. Timofieff was driving from one town to another, and at the twenty second verst (two thirds of a mile) one of the horses stopped suddenly. The driver got down from his seat and gave the animal a measure of oats, at the same time explaining to the passenger that the horse was accustomed to being fed after every twenty fifth verst. This time it had made a mistake, but it could not be blamed, as it did not judge of the distance traversed by its own fatigue or hunger, but by counting the verst posts along the road. It had mistaken for some of these posts three others which greatly resembled them, but which merely served to mark the boundry of the state forest.

The same horse was always fed in the stable at noon, and Dr. Timofleff himself observed that whenever a neighboring church clock began to strike the animal raised its head and listened attentively. When the strokes were less than twelve it put down its head sadly, but it displayed every sign of joyful expectation when it neared twelve strikes and knew that dinner time had arrived.

Trains Without Rails.

Experiments which are described as satisfactory have recently been made in the suburbs of Paris with a train, drawn by a steam locomotive, running not on rails but on an ordinary road. The train used at present consists of only two cars, one of which contains the locomotive machinery, together with seats for fourteen passengers, while the other has twenty-four seats. The engine is of 16 horse-power and the average speed is about seven miles an hour. The train is able to turn in a circle only 23 feet in diameter. Another train has been constructed for the convevance of freight. It is hoped by the inventors that trains of this kind will be extensively employed in and near cities.

WATER RICH IN COPPER.

Outflow From the Anaconda Mine Worth a Fortune Every Month.

One of the most interesting sights in the great mining town of Butte is the process by which copper is caught from the emerald-colored water that flows from the Anaconda and St. Lawrence mines. It is estimated that this water, which for four or five years went to waste, is now bringing the Anaconda Company $30 000 a month, at a cost of about $1 000 a month

It is only within the present year that the company undertook to handle this water. Heretofore it was worked under lease. An old German named Mueller was the first man to save copper from the water.

During the last three years Thomas Ledford had a lease on the water. He paid a 25 per cent. royalty to the company. It is claimed that he realized at least $100.000 a year from the water Ledford is a pretty rich man to-day. Now that the company is operating the water on its own account, it has discovered what a great money-making enterprise it is.

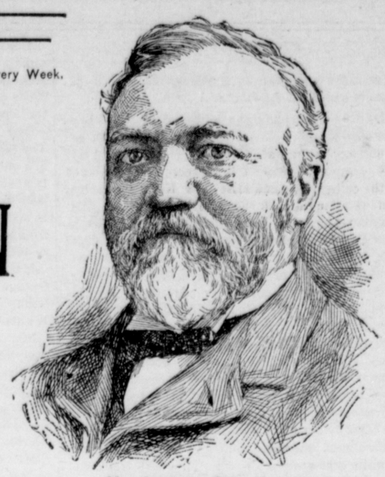
At the present time several acres of ground are covered with wooden vats. These are filled with all the old scrap iron they can hold. It has proved a splendid scheme for the disposing of the tons and tons of old iron the company has accumulated for years. Old hoisting cages, water pipes, wheelbarrows, railroad iron, in fact any old thing that consists of tin or iron is appropriated to this service.

It is said for every pound of iron put into a vat a pound of copper is produced Where the water first attacks the iron the copper absorbs the iron completely within three weeks. After the precipitation is effected the water is drawn off and the slimy copper is transferred to another tank, where the water is further drained off. These latter vats hold about fifteen tons of the copper, which now has the appearance of a clayish substance. This is sacked into packages of about 100 pounds. When in this shape it is sent to the smelters in this city The product carries an average of 86 per cent. pure copper The iron remaining in it makes a fine flux, and when mixed with other smelting ore it is said to bring the ore up to a value of about $300 a ton.

Established 1827. Comes Every Week.

THE YOUTH'S COMPANION

The Companion of the Whole Family.



MR. ANDREW CARNEGIE, ONE OF THE EMINENT CONTRIBUTORS FOR 1897.

The Prospectus of The Companion for 1897 offers many brilliant features which will give the paper great practical and educational value.

Papers of Great Worth.

Besides a delightful supply of fascinating Stories, Adventures, Serial Stories, Humorous Travel and Sketches, Anecdotes, etc., each Volume of THE COMPANION furnishes an unusual number of Articles of exceptional value written by men and women at the very forefront of their professions. Below are named a few of the Articles already engaged for 1897.

THE HABIT OF THRIFT.	Andrew Carnegie.
THE COST OF BECOMING A DOCTOR.	Dr. Austin Flint.
HOW TO TRAIN THE VOICE.	Madame Lillian Nordica.
NURSING AS A CAREER.	Dr. William L. Love.
CLEANING THE METROPOLIS.	Col. George E. Waring, Jr.
THE NEW YORK POLICE FORCE.	Hon. Theodore Roosevelt.
THE REAL MIDSHIPMAN.	W. Clark Russell.
THE QUEEN'S HOUSEHOLD.	Lady Jeune.
NEW CURES FOR OLD DISEASES.	Dr. Cyrus Edson.
SCHOOL LIFE IN FRANCE.	Max O'Rell.
BIG AND LITTLE WORLDS.	Sir Robert S. Ball.
AMONG THE IMMIGRANTS.	Alvan F. Sanborn.
HOW LINCOLN EDUCATED HIMSELF.	Jesse W. Weik.
HOW I BECAME AN ARCTIC EXPLORER.	Adm'l A. H. Markham, R.N.
MY EXPERIENCES WITH INDIANS.	Hon. Carl Schurz.

In addition to the twenty-five staff writers THE COMPANION Contributors number fully two hundred of the most famous men and women of both continents, including the most popular writers of fiction and some of the most eminent statesmen, scientists, travellers and musicians. More than Forty of the most popular Artists of the day will prepare illustrations in keeping with the excellence of the Articles contributed.

One of the most beautiful CALENDARS issued this year will be given to each New Subscriber to The Companion.

It is made up of Four Charming Pictures in color, beautifully executed. Its size is 10 by 24 inches. The subjects are delightfully attractive. This Calendar is published exclusively by The Youth's Companion and could not be sold in Art Stores for less than $1.00.

700 Large Pages in Each Volume — 52 Weeks for $1.75 — Send for Illustrated Prospectus.

12-Color Calendar FREE.

New Subscribers who will cut out this slip and send it at once with name and address and $1.75 will receive:
FREE — The Youth's Companion every week from the time subscription is received till January 1, 1897;
FREE — Thanksgiving, Christmas and New Year's Double Numbers;
FREE — The Companion's 4-page Calendar for 1897, a beautifully colored souvenir. The most costly gift of its kind The Companion has ever offered;
And The Companion Fifty-two Weeks, a full year, to Jan. 1, 1898.
115

See Special Offers.

THE YOUTH'S COMPANION, 201 Columbus Ave., Boston, Mass.

Help

Is needed by poor, tired mothers, overworked and burdened with care, debilitated and run down because of poor, thin and impoverished blood. Help is needed by the nervous sufferer, the men and women tortured with rheumatism, neuralgia, dyspepsia, scrofula, catarrh. Help

Comes Quickly

When Hood's Sarsaparilla begins to enrich, purify and vitalize the blood, and sends it in a healing, nourishing, invigorating stream to the nerves, muscles and organs of the body. Hood's Sarsaparilla builds up the weak and broken down system, and cures all blood diseases, because

Hood's Sarsaparilla

Is the One True Blood Purifier. All druggists. $1. Prepared only by C. I. Hood & Co., Lowell, Mass.

Hood's Pills are the only pills to take with Hood's Sarsaparilla.

LITTLE BRAVES!

Old time a quarter-a-box "Purgers" are Aquitting the field in whole battalions.

Dr. Agnew's Liver Pills at 10cts. a vial are driving them out at all points.

Because they act gently, more effectively, never pain, and are easy to take.

Sick Headache succumbs to one dose. Chronic Constipation dispelled with one vial, and Stomach Disorders of years standing absolutely cured. 40 doses 10c., at all druggists.

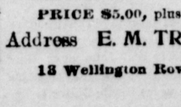
THE QUAKER

Hot Air Vapor

BATH CABINET

For home use. Provides a means of obtaining Hot Air, Vapor, Medicated and Perfumed Baths in your own bedroom, without water supply, at small cost. Sure cure for colds, rheumatism, etc. Prevents and cures obesity. A pleasant substitute for physical exercise. Send for descriptive circular. Local agents wanted, ladies or gentlemen, throughout New Brunswick.

MFD. BY WORLD MFG. CO., COLUMBUS, OHIO.



PRICE $5.00, plus duty and express.

Address E. M. TREE, Gen'l Agent, 13 Wellington Row, St. John, N. B.

Take notice to-day. This ad. will not appear again).

$150 IN GOLD

FREE! FREE! TO Women

Who can form the greatest number of words from the letters in INDUSTRIOUS? You can make twenty or more words, we feel sure, and if you do you will receive a good reward. Do not use any letter more times than it appears in the word. Use no language except English. Words spelled alike, but with different meaning, can be used but once. Use any dictionary. Plurals, pronouns, nouns, verbs, adverbs, prefixes, suffixes, adjectives, proper nouns allowed. Anything that is a legitimate word will be allowed. Work it out in this manner: In, into, industrious, no, not, nu, nuts, dust, dusts, us sit, sits etc. Use these words in your list. The publisher of WOMAN'S WORLD AND JENNESS MILLER MONTHLY will pay $20 00 in gold to the person able to make the largest list of words from the letters in the word INDUSTRIOUS; $12 00 for the second largest; $10 00 for the third; $8 00 for the fourth; $5 00 for the ten next largest, and $2.00 each for the twenty-five next largest lists. The above rewards are given free and without consideration for the purpose of attracting attention to our handsome woman's magazine, twenty-four pages, ninety-six long columns, finely illustrated, and all original matter, long and short stories by the best authors; price $1 00 per year. It is necessary for you, to enter the contest, to send 12 two-cent stamps for a three months' trial subscription with your list of words, and every person sending the 24 cents and a list of twenty words or more is guaranteed an extra present by return mail (in addition to the magazine,) of a 200 page book, "Doris's Fortune" by Florence Warden, a love story of intense interest. Satisfaction guaranteed in every case or your money refunded. Lists should be sent at once, and no later than Jan. 20. The names and addresses of successful contestants will be printed in February issue, published in January. Our publication has been established nine years. We refer you to any mercantile agency for our standing. Make your list now. Address JAMES H. PLUMMER, Publisher, 905 Temple Court Building, New York City

SPENCER'S

Private Dancing

My Academy will be open on THURSDAY AFTERNOON and EVENING, Oct. 29, for the reception of pupils, at 74 Germain Street.

A. L. SPENCER, Teacher.

Relieves Your Cough In Ten Minutes. . . .

HAYMAN'S Balsam Horehound

For Influenza, Cough, Cold, etc.

SAFE FOR CHILDREN

"Never known it to fail to give relief."—Mr. Eli Boussier, Pere Cottage, Lamborne.
"Found invaluable for bad coughs and colds."—Mrs. Esson, London Road, Sleaford.

STOPS COLD. CURES COUGH.

Sold everywhere. Price 50c.

Sole Wholesale Agents for Canada: EVANS & SONS, Ltd., Montreal and Toronto.