# VONDER Stories

**HUGO GERNSBACK** 

September "THE IDEAL"

by Stanley G. Weinbaum

BEST

IN

SCIENCE

FICTION



# WONDER STORIES



"The Magazine of Prophetic Fiction"

#### VOL. 7 No. 4 SEPTEMBER, 1935

Published by Continental Publications, Inc. H. Gernsback, President; I. S. Manhelmer, Secretary. Publication Office, Myrick Building, 29 Worthington Street, Springfield, Mass, Editorial and General Offices, 99 Hudson Street, New York, N. Y.

WONDER STORIES—Monthly—Entered as second-class matter at the post office at Springfield, Mass., under the Act of March S, 1879. Title registered U. S. Patent Office. Copyright, 1935, by Continental Publications, Inc. Text and Illustrations of this magazine are copyrighted and must not be reproduced without permission of the copyright owners. WONDER STORIES is jubilished on the first of the preceding month, 12 numbers per year. Subscription prices is \$1.50 a year in United States and its possessions, in foreign countries, exclusive of Canada, \$2.00 a year. Single copies, 15c. Address all contributions for publication to Editor, WONDER STORIES, 99 Hudson Street, New York, Publishers are not responsible for beat MSS. Centributions cannot be returned unless authors remit full postage.

WONDER STORIES is for sale at principal new-stands in the United States. IF YOU WISH TO SUBSCILIES to WONDER STORIES, make out all remittances to the Continental Publications. Inc. He sure to mention the name of magazine you wish to subscribe for, as we are also agent; for the following magazines: HADIO-CRAFT and EVERYDAY SCIENCE AND MECLANICS. Subscriptions can be made in combination with the above jubilications at a reduced club rate. Ask for information. Subscriptions start with current Issue unless otherwise specified.

WHEN YOUR SUBSCRIPTION EX-PIRES, we enclose a renewal blank in the last number. No subscription continued unless renewal remittance is received.

CHANGE OF ADDRESS. Always give us old as well as new address and notify us as far in advance as possible.

Chicago Advertising Representative:

William H. Stewart, Inc., 9 South Clinton Street.

Western Advertising Representative: Lloyd B. Chappell, \$11 So. Alexandria St., Los Angeles, Calif.

European Agent: Gorringo's American News Agency, 9A Green St., Leleester Square, Lendon, W. C. 2, England,

## Table of Contents

| • EDITORIAL  |                                 |
|--|---------------------------------|
| WONDERS OF TRANSPLANTED ORGANS by Hugo Gernsback                       | 389                             |
| • COMPLETE STORIES   |                                 |
| THE IDEAL by Stanley G. WeinbaumONE HUNDRED GENERATIONS by Philip      | 416                             |
| Jacques Bartel   | 430                             |
| THE SPACE LENS by Millard Verne Gordon                                 | 452                             |
| • SERIAL NOVELS  |                                 |
| WORLD OF THE MIST by Laurence Manning (In Two Parts-Part One)          | 390                             |
| THE GREEN MAN OF GRAYPEC by Festus Pragnell(In Three Parts—Conclusion) | 458                             |
|  |                                 |
| • ARTICLES   |                                 |
| Man Will Reach Moon  | 415                             |
| No People on Mars?   | 429                             |
| • DEPARTMENTS  |                                 |
|  |                                 |
|  | 491                             |
| Forthcoming Stories  | 491<br>494                      |
| Forthcoming Stories  |                                 |
| Forthcoming Stories  | 494                             |
| Forthcoming Stories  | 494<br>496                      |
| Forthcoming Stories  | 494<br>496<br>499               |
| Forthcoming Stories  | 494<br>496<br>499<br>500        |
| Forthcoming Stories  | 494<br>496<br>499<br>500<br>510 |

This month we find illustrated one of the conceptions of the most conceited scientist in the world—Haskel van Manderpootz, showing the mechanical equivalent of the predatory tiger—from "The Ideal" by Stanley G. Weinbaum. Cover by the famous Paul.



(Illustration by Paul)

"Through the metal throat of its victim crash steel teeth; the blood of its prey—the gasoline, that is—is drained into its stomach, its gas tank."

## By STANLEY G. WEINBAUM

"This," said the Franciscan, "is my Automaton, who at the proper time will speak, answer whatsoever question I may ask, and reveal all secret knowledge to me." He smiled as he laid his hand affectionately on the iron skull that topped the pedestal.

The youth gazed open-mouthed, first at the head and then at the Friar. "But it's iron!" he whispered. "The head is iron, good father."

"Iron without, skill within, my son," said Roger Bacon. "It will speak, at the proper time and in its own manner, for so have I made it. A clever man can twist the devil's arts to God's ends, thereby cheating the fiend—Sst! There sounds vespers! Plena gratiâ, ave Virgo—"

But it did not speak. Long hours, long weeks, the doctor mirabilis watched his creation, but the iron lips were silent and the iron eyes dull, and no voice but the great man's own sounded in his monkish cell, nor was there ever an answer to all the questions that he asked—until one day when he sat surveying his work, composing a letter to Duns Scotus in distant Cologne—one day—

"Time is!" said the image, and smiled benignly.

The Friar looked up. "Time is, indeed," he echoed. "Time it is that you give utterance, and to some assertion less obvious than that time is. For of course time is, else there were nothing at all. Without time—"

"Time was!" rumbled the image, still smiling, but sternly as the statue of Draco.
"Indeed time was" said the Monk

"Indeed time was," said the Monk.
"Time was, is, and will be, for time is

• Who is the greatest scientist that ever lived? Einstein? Galileo? Edison? If you have read the author's "The Worlds of If" in the last issue, you will know that it is van Manderpootz. He is the greatest scientist of all history!—he even admits it himself.

We find the great van Manderpootz again in the present story—the second of the series concerning the association with this colossal intellect of Dixon Wells, an ordinary mortal, who is in such a habit of always being late to every affair that even a watch runs slow as soon as he buys it.

The same entrancing humor, that can't-put-it-d o w n-till-you're-finished effect, pervades Mr. Weinbaum's present effort with the same masterful quality of his epic-making "Tweel" stories.

We suggest that you have this story retyped so that you will not wear the magazine out re-reading it so many times. Mr. Weinbaum has definitely established himself as science-fiction's master of humor—not slap-stick comedy or burlesque—but honest-to-goodness, wholesome, subtle humor.

that medium in which events occur. Matter exists in space, but events—"

The image smiled no longer. "Time is past!" it roared in tones deep as the cathedral bell outside, and burst into ten thousand pieces.

• "There," said old Haskel van Manderpootz, shutting the book, "is my classical authority in this experiment. This story, overlaid as it is with mediaeval myth and legend, proves that Roger Bacon himself attempted the experiment—and failed." He shook a long finger at me. "Yet do not get the impression, Dixon, that Friar Bacon was not a great man. He was—extremely great, in fact; he lighted the torch that his namesake Francis Bacon

took up four centuries later, and that now van Manderpootz rekindles."

I stared in silence.

"Indeed," resumed the Professor, "Roger Bagon might almost be called a thirteenth century van Manderpootz, or van Manderpootz a twenty-first century Roger Bacon. His Opus Majus, Opus Minor, and Opus Tertium—"

"What," I interrupted impatiently, "has all this to do with—that?" I indicated the clumsy metal robot standing in the corner of the laboratory.

"Don't interrupt!" snapped van Manderpootz. "I'll--"

At this point I fell out of my chair. The mass of metal had ejaculated something like "A-a-gh-rasp" and had lunged a single pace toward the window, arms upraised. "What the devil!" I sputtered as the thing dropped its arms and returned stolidly to its place.

"A car must have passed in the alley," said van Manderpootz indifferently. "Now, as I was saying, Roger Bacon—"

I ceased to listen. When van Manderpootz is determined to finish a statement, interruptions are worse than futile. As an ex-student of his, I know. So I permitted my thoughts to drift to certain personal problems of my own, particularly Tips Alva, who was the most pressing problem of the moment. Yes, I mean Tips Alva the 'vision dancer, the little blonde imp who entertains on the Yerba Mate hour for that Brazilian company. Chorus girls, dancers, and television stars are a weakness of mine; maybe it indicates that there's a latent artistic soul in me. Maybe.

I'm Dixon Wells, you know, scion of the N. J. Wells Corporation, Engineers Extraordinary. I'm supposed to be an engineer myself; I say supposed, because in the seven years since my graduation, my father hasn't given me much opportunity to prove it. He has a stronge sense of the value of time, and I'm cursed with the unenviable quality of being late to anything and for everything. He even asserts that the occasional designs I submit are Late Jacobean, but that isn't fair. They're Post-Romanesque.

Old N. J. also objects to my penchant for ladies of the stage and 'vision screen, and periodically threatens to cut my allowance, though that's supposed to be a salary. It's inconvenient to be so dependent, and sometimes I regret that unfortunate market crash of 2009 that wiped out my own money, although it did keep me from marrying Whimsy White, and van Manderpootz, through his subjunctivisor\*, succeeded in proving that that would have been a catastrophe. But it turned out nearly as much of a disaster anyway, as far as my feelings were concerned. It took me months to forget Joan Caldwell and her silvery eyes. That was just another instance when I was a little late.

Van Manderpootz himself is my old Physics Professor, head of the Department of Newer Physics at N. Y. U., and a genius, but a bit eccentric. Judge for yourself.

"And that's the thesis," he said suddenly, interrupting my thoughts.

"Eh? Oh, of course. But what's that grinning robot got to do with it?"

He purpled. "I've just told you!" he roared. "Idiot! Imbecile! To dream while van Manderpootz talks! Get out! Get out!"

I got. It was late anyway, so late that I overslept more than usual in the morning, and suffered more than the usual lecture on promptness from my father at the office.

• Van Manderpootz had forgotten his anger by the next time I dropped in for an evening. The robot still stood in the corner near the window, and I lost no time in asking its purpose.

"It's just a toy I had some of the students construct," he explained. "There's a screen of photoelectric cells behind the right eye, so connected that when a certain pattern is thrown on them, it activates the mechanism. The thing's plugged into the light-circuit, but it really ought to run on gasoline."

<sup>&</sup>quot;"The Worlds of If"

"Why?"

"Well, the pattern it's set for is the shape of an automobile. See here." He picked up a card from his desk, cut in the outlines of a streamlined car like those of that year. "Since only one eye is used," he continued, "the thing can't tell the difference between a full-sized vehicle at a distance and this small outline nearby. It has no sense of perspective."

He held the bit of cardboard before the eye of the mechanism. Instantly came its roar of "A-a-gh-rasp!" and it leaped forward a single pace, arms upraised. Van Manderpootz withdrew the card, and again the thing relapsed stolidly into its place.

"What the devil!" I exclaimed. "What's it for?"

"Does van Manderpootz ever do work without reason back of it? I use it as a demonstration in my seminar."

"To demonstrate what?"

"The power of reason," said van Manderpootz solemnly.

"How? And why ought it to work on gasoline instead of electric power?"

"One question at a time, Dixon. You have missed the grandeur of van Manderpootz's concept. See here, this creature, imperfect as it is, represents the predatory machine. It is the mechanical parallel of the tiger, lurking in its jungle to leap on living prey. This monster's jungle is the city; its prey is the unwary machine that follows the trails called streets. Understand?"

"No."

"Well, picture this automaton, not as it is, but as van Manderpootz could make it if he wished. It lurks gigantic in the shadows of buildings; it creeps stealthily through dark alleys; it skulks on deserted streets, with its gasoline engine purring quietly. Then — an unsuspecting automobile flashes its image on the screen back of its eyes. It leaps. It seizes its prey, swinging it in steel arms to its steel jaws. Through the metal throat of its victim crash steel teeth; the blood of its prey—the gasoline, that is—is drained into its stomach, or its gas-tank. With renewed

strength it flings away the husk and prowls on to seek other prey. It is the machine-carnivore, the tiger of mechanics."

I suppose I stared dumbly enough. It occurred to me suddenly that the brain of the great van Manderpootz was cracking. "What the—?" I gasped.

"That," he said blandly, "is but a concept. I have many another use for the toy. I can prove anything with it, anything I wish."

"You can? Then prove something."
"Name your proposition, Dixon."

I hesitated, nonplussed.

"Come!" he said impatiently. "Look here; I will prove that anarchy is the ideal government, or that Heaven and Hell are the same place, or that—"

"Prove that!" I said. "About Heaven and Hell."

"Easily. First we will endow my robot with intelligence. I add a mechanical memory by means of the old Cushman delayed valve; I add a mathematical sense with any of the calculating machines; I give it a voice and a vocabulary with the magnetic-impulse wire phonograph. Now the point I make is this: Granted an intelligent machine, does it not follow that every other machine constructed like it must have the identical qualities? Would not each robot given the same insides have exactly the same character?"

"No!" I snapped. "Human beings can't make two machines exactly alike. There'd be tiny differences; one would react quicker than others, or one would prefer Fox Airsplitters as prey, while another reacted most vigorously to Carnecars. In other words, they'd have—individuality!" I grinned in triumph.

"My point exactly," observed van Manderpootz. "You admit, then, that this individuality is the result of imperfect workmanship. If our means of manufacture were perfect, all robots would be identical, and this individuality would not exist. Is that true?"

"I—suppose so."

"Then I argue that our own individuality is due to our falling short of perfec-

tion. All of us—even van Manderpootz—are individuals only because we are not perfect. Were we perfect, each of us would be exactly like everyone else. True?"

"Uh-yes."

"But Heaven, by definition, is a place where all is perfect. Therefore, in Heaven everybody is exactly like everybody else, and therefore, everybody is thoroughly and completely bored! There is no torture like boredom, Dixon, and— Well, have I proved my point?"

I was floored. "But—about anarchy, then?" I stammered.

"Simple. Very simple for van Manderpootz. See here; with a perfect nation that is, one whose individuals are all exactly alike, which I have just proved to constitute perfection—with a perfect nation, I repeat, laws and government are utterly superfluous. If everybody reacts to stimuli in the same way, laws are quite useless, obviously. If, for instance, a certain event occurred that might lead to a declaration of war, why, everybody in such a nation would vote for war at the same instant. Therefore government is unnecessary, and therefore anarchy is the ideal government, since it is the proper government for a perfect race." paused. "I shall now prove that anarchy is not the ideal government—"

"Never mind!" I begged. "Who am I to argue with van Manderpootz? But is that the whole purpose of this dizzy robot?—just a basis for logic?" The mechanism replied with its usual rasp as it leaped toward some vagrant car beyond the window.

"Isn't that enough?" growled van Manderpootz. "However,"—his voice dropped—"I have even a greater destiny in mind. My boy, van Manderpootz has solved the riddle of the universe!" He paused impressively. "Well, why don't you say something?

"Uh!" I gasped. "It's—uh—marvelous!"

"Not for van Manderpootz," he said modestly.

"But-what is it?"

"Eh—Oh!" He frowned. "Well, I'll tell you, Dixon. You won't understand, but I'll tell you." He coughed. "As far back as the early twentieth century," he resumed, "Einstein proved that energy is particular. Matter is also particular, and now van Manderpootz adds that space and time are discrete!" He glared at me.

"Energy and matter are particular," I murmured, "and space and time are discreet! How very moral of them!"

"Imbecile!" he blazed. "To pun on the words of van Manderpootz! You know very well that I mean particular and discrete in the physical sense. Matter is composed of particles, therefore it is particular. The particles of matter are called electrons, protons, and neutrons, and those of energy, quanta. I now add two others; the particles of space I call spations, those of time, chronons."

"And what in the devil," I asked, "are particles of space and time?"

"Just what I said!" snapped van Manderpootz. "Exactly as the particles of matter are the smallest pieces of matter that can exist, just as there is no such thing as a half of an electron, or for that matter, half a quantum, so the chronon is the smallest possible fragment of time, and the spation the smallest possible bit of space. Neither time nor space are continuous; each is composed of these infinitely tiny fragments."

"Well, how long is a chronon in time? How big is a spation in space?"

"Van Manderpootz has even measured that. A chronon is the length of time it takes one quantum of energy to push one electron from one electronic orbit to the next. There can obviously be no shorter interval of time, since an electron is the smallest unit of matter and the quantum the smallest unit of energy. And a spation is the exact volume of a proton. Since nothing smaller exists, that is obviously the smallest unit of space."

"Well, look here," I argued. "Then what's in between these particles of space and time? If time moves, as you say, in

jerks of one chronon each, what's between the jerks?"

"Ah!" said the great van Manderpootz. "Now we come to the heart of the matter. In between the particles of space and time. inside the particles of matter and energy, must obviously be something that is neither space, time, matter, nor energy. A hundred years ago Shapley anticipated van Manderpootz in a vague way when he announced his cosmoplasma, the great underlying matrix in which time and space and the universe are embedded. Now van Manderpootz announces the ultimate unit, the universal particle, the focus in which matter, energy, time, and space meet, the unit from which electrons, protons, neutrons, quanta, spations, and chronons are all constructed. The riddle of the universe is solved by what I have chosen to name the cosmon." His blue eves bored into me.

"Magnificent!" I said feebly, knowing that some such word was expected. "But what good is it?"

"What good is it?" he roared. "It provides—or will provide, once I work out a few details—the means of turning energy into time, or space into matter, or time into space, or—" He sputtered into silence. "Fool!" he muttered. "To think that you studied under the tutelage of van Manderpootz. I blush; I actually blush!"

One couldn't have told it if he were blushing. His face was always rubicund enough. "Colossal!" I said hastily. "What a mind!"

That mollified him. "But that's not all," he proceeded. "Van Manderpootz never stops short of perfection. I now announce the unit particle of thought—the psychon!"

This was a little too much. I simply stared.

"Well may you be dumbfounded," said van Manderpootz. "I presume you are aware, by hearsay at least, of the existence of thought. The psychon, unit of thought, is one electron plus one proton, which are bound so as to form one neutron, embedded in one cosmon, occupying a volume of one spation, driven by one quantum for a period of one chronon. Very obvious; very simple."

"Oh, very!" I echoed. "Even I can see that that equals one psychon."

He beamed. "Excellent! Excellent!"
"And what," I asked, "will you do with the psychons?"

"Ah!" he rumbled. "Now we go even past the heart of the matter, and return to Isaak here." He jammed a thumb toward the robot. "Here I will create Roger Bacon's mechanical head. In the skull of this clumsy creature will rest such intelligence as not even van Manderpootz—I should say, as only van Manderpootz—can conceive. It remains merely to construct my idealizator."

"Your idealizator?"

"Of course. Have I not just proven that thoughts are as real as matter, energy, time, or space? Have I not just demonstrated that one can be transformed, through the cosmon, into any other? My idealizator is the means of transforming psychons to quanta, just as, for instance, a Crookes tube or x-ray tube transforms matter to electrons. I will make your thoughts visible! And not your thoughts as they are in that numb brain of yours, but in ideal form. Do you see? The psychons of your mind are the same as those from any other mind, just as all electrons are identical, whether from gold or iron. Yes! Your psychons"—his voice quavered—"are identical with those from the mind of — van Manderpootz!" He paused, shaken.

"Actually?" I gasped.

"Actually. Fewer in number, of course, but identical. Therefore, my idealizator shows your thought released from the impress of your personality. It shows it—ideal!"

Well, I was late to the office again.

• A week later I thought of van Manderpootz. Tips was on tour somewhere, and I didn't dare take anyone else out because I'd tried it once before and she'd heard about it. So, with nothing to do, I finally dropped around to the professor's quarters, found him missing, and eventually located him in his laboratory at the Physics Building. He was puttering around the table that had once held that damned subjunctivisor of his, but now it supported an indescribable mess of tubes and tangled wires, and as its most striking feature, a circular plane mirror etched with a grating of delicately scratched lines.

"Good evening, Dixon," he rumbled.
I echoed his greeting. "What's that?"
I asked.

"My idealizator. A rough model, much too clumsy to fit into Isaak's iron skull. I'm just finishing it to try it out." He turned glittering blue eye on me. "How fortunate that you're here. It will save the world a terrible risk."

"A risk?"

"Yes. It is obvious that too long an exposure to the device will extract too many psychons, and leave the subject's mind in a sort of moronic condition. I was about to accept the risk, but I see now that it would be woefully unfair to the world to endanger the mind of van Manderpootz. But you are at hand, and will do very well."

"Oh, no I won't!"

"Come, come!" he said, frowning. "The danger is negligible. In fact, I doubt whether the device will be able to extract any psychons from your mind. At any rate, you will be perfectly safe for a period of at least half an hour. I, with a vastly more productive mind, could doubtless stand the strain indefinitely, but my responsibility to the world is too great to chance it until I have tested the machine on someone else. You should be proud of the honor."

"Well, I'm not!" But my protest was feeble, and after all, despite his overbearing mannerisms, I knew van Manderpootz liked me, and I was positive he would not have exposed me to any real danger. In the end I found myself seated before the table facing the etched mirror.

"Put your face against the barrel," said van Manderpootz, indicating a stove-pipelike tube. "That's merely to cut off extraneous sights, so that you can see only the mirror. Go ahead, I tell you! It's no more than the barrel of a telescope or microscope."

I complied. "Now what?" I asked.

"What do you see?"

"My own face in the mirror."

"Of course. Now I start the reflector rotating." There was a faint whir, and the mirror was spinning smoothly, still with only a slightly blurred image of myself. "Listen, now," continued van Manderpootz. "Here is what you are to do. You will think of a generic noun. 'House,' for instance. If you think of house, you will see, not an individual house, but your ideal house, the house of all your dreams and desires. If you think of horse, you will see what your mind conceives as the perfect horse, such a horse as dream and longing create. Do you understand? Have you chosen a topic?"

"Yes." After all, I was only twenty-eight; the noun I had chosen was—girl.
"Good," said the professor. "I turn on the current."

There was a blue radiance behind the mirror. My own face still stared back at me from the spinning surface, but something was forming behind it, building up, growing. I blinked; when I focused my eyes again, it was—she was—there.

• Lord! I can't begin to describe her. I don't know even if I saw her clearly that first time. It was like looking into another world and seeing the embodiment of all longings, dreams, aspirations, and ideals. It was so poignant a sensation that it crossed the borderline into pain. It was —well, exquisite torture or agonized delight. It was at once unbearable and irresistible.

But I gazed. I had to. There was a haunting familiarity about the impossibly beautiful features. I had seen the face—somewhere—sometime. In dreams? No; I realized suddenly what was the source of that familiarity. This was no living woman, but a synthesis. Her nose was the tiny, impudent one of Whimsy

White at her loveliest moment; her lips were the perfect bow of Tips Alva; her silvery eyes and dusky velvet hair were those of Joan Caldwell. But the aggregate, the sum total, the face in the mirror—that was none of these; it was a face impossibly, incredibly, outrageously beautiful.

Only her face and throat were visible, and the features were cool, expressionless, and still as a carving. I wondered suddenly if she could smile, and with the thought, she did. If she had been beautiful before, now her beauty flamed to such a pitch that it was—well, insolent; it was an affront to be so lovely; it was insulting. I felt a wild surge of anger that the image before me should flaunt such beauty, and yet be—non-existent! It was deception, cheating, fraud, a promise that could never be fulfilled.

Anger died in the depths of that fascination. I wondered what the rest of her was like, and instantly she moved gracefully back until her full figure was visible. I must be a prude at heart, for she wasn't wearing the usual cuirass-and-shorts of that year, but an iridescent four-paneled costume that all but concealed her dainty knees. But her form was slim and erect as a column of cigarette smoke in still air, and I knew that she could dance like a fragment of mist on water. And with that thought she did move, dropping in a low curtsy, and looking up with the faintest possible flush crimsoning the curve of her throat. Yes, I must be a prude at heart; despite Tips Alva and Whimsy White and the rest, my ideal was modest.

It was unbelievable that the mirror was simply giving back my thoughts. She seemed as real as myself, and—after all—I guess she was. As real as myself, no more, no less, because she was part of my own mind. And at this point I realized that van Manderpootz was shaking me and bellowing, "Your time's up. Come out of it! Your half-hour's up!"

He must have switched off the current. The image faded, and I took my face from the tube, dropping it on my arms. "O-o-o-o-oh!" I groaned.

"How do you feel?" he snapped.
"Feel? All right—physically." I look

"Feel? All right—physically." I looked up.

Concern flickered in his blue eyes. "What's the cube root of 4913?" he crackled sharply.

I've always been quick at figures. "It's —uh—17," I returned dully. "Why the devil—?"

"You're all right mentally," he announced. "Now—why were you sitting there like a dummy for half an hour? My idealizator must have worked, as is only natural for a van Manderpootz creation, but what were you thinking of?"

"I thought—I thought of 'girl'," I groaned.

He snorted. "Hah! You would, you idiot! 'House' or 'horse' wasn't good enough; you had to pick something with emotional connotations. Well, you can start right in forgetting her, because she doesn't exist."

I couldn't give up hope as easily as that. "But can't you—can't you—?" I didn't even know what I meant to ask.

"Van Manderpootz," he announced, "is a mathematician, not a magician. Do you expect me to materialize an ideal for you?" When I had no reply but a groan, he continued. "Now I think it safe enough to try the device myself. I shall take—let's see—the thought 'man.' I shall see what the superman looks like, since the ideal of van Manderpootz can be nothing less than superman." He seated himself. "Turn that switch," he said. "Now!"

I did. The tubes glowed into slow blue life. I watched dully, disinterestedly; nothing held any attraction for me after that image of the ideal.

"Huh!" said van Manderpootz suddenly. "Turn it on, I say! I see nothing but my own reflection."

I stared, then burst into a hollow laugh. The mirror was spinning; the banks of tubes were glowing; the device was operating.

Van Manderpootz raised his face, a little redder than usual. I laughed half hysterically. "After all," he said huffily, "one might have a lower ideal of man than van Manderpootz. I see nothing nearly so humorous as your situation."

The laughter died. I went miserably home, spent half the remainder of the night in morose contemplation, smoked nearly two packs of cigarettes, and didn't get to the office at all the next day.

• Tips Alva got back to town for a weekend broadcast, but I didn't even bother to see her, just phoned her and told her I was sick. I guess my face lent credibility to the story, for she was duly sympathetic, and her face in the phone screen was quite anxious. Even at that, I couldn't keep my eyes away from her lips because, except for a bit too lustrous make-up, they were the lips of the ideal. But they weren't enough; they just weren't enough.

Old N. J. began to worry again. I couldn't sleep late of mornings any more, and after missing that one day, I kept getting down earlier and earlier until one morning I was only ten minutes late. He called me in at once.

"Look here, Dixon," he said. "Have you been to a doctor recently?"

"I'm not sick," I said listlessly.

"Then for Heaven's sake, marry the girl! I don't care what chorus she kicks in, marry her and act like a human being again."

"I-can't."

"Oh. She's already married, eh?"

Well, I couldn't tell him she didn't exist. I couldn't say I was in love with a vision, a dream, an ideal. He thought I was a little crazy anyway, so I just muttered "Yeah," and didn't argue when he said gruffly: "Then you'll get over it. Take a vacation. Take two vacations. You might as well for all the good you are around here."

I didn't leave New York; I lacked the energy. I just mooned around the city for a while, avoiding my friends, and dreaming of the impossible beauty of the face in the mirror. And by and by the longing to see that vision of perfection once more began to become overpowering. I don't suppose anyone except me can

understand the lure of that memory; the face, you see, had been my ideal, my concept of perfection. One sees beautiful women here and there in the world; one falls in love, but always, no matter how great their beauty nor how deep one's love, they fall short in some degree of the secret vision of the ideal. But not the mirrored face; she was my ideal, and therefore, whatever imperfections she might have had in the minds of others, in my eyes she had none. None, that is, save the terrible one of being only an ideal, and therefore unattainable — but that is a fault inherent in all perfection.

It was a matter of days before I yielded. Common sense told me it was futile, even foolhardy, to gaze again on the vision of perfect desirability. I fought against the hunger, but I fought hopelessly, and was not at all surprised to find myself one evening rapping on van Manderpootz's door in the University Club. He wasn't there; I'd been hoping he wouldn't be, since it gave me an excuse to seek him in his laboratory in the Physics Building, to which I would have dragged him anyway.

There I found him, writing some sort of notations on the table that held the idealizator. "Hello, Dixon," he said. "Did it ever occur to you that the ideal university cannot exist? Naturally not, since it must be composed of perfect students and perfect educators, in which case the former could have nothing to learn and the latter, therefore, nothing to teach."

What interest had I in the perfect university and its inability to exist? My whole being was desolate over the non-existence of another ideal. "Professor," I said tensely, "may I use that—that thing of yours again? I want to—uh—see something."

My voice must have disclosed the situation, for van Manderpootz looked up sharply. "So!" he snapped. "Do you disregard my advice? Forget her, I said. Forget her because she doesn't exist."

"But—I can't! Once more, Professor—only once more!"

• He shrugged, but his blue, metallic eyes were a little softer than usual. After all, for some inconceivable reason, he liked me. "Well, Dixon," he said, "you're of age and supposed to be of mature intelligence. I tell you that this is a very stupid request, and van Manderpootz always knows what he's talking about. If you want to stupefy yourself with the opium of impossible dreams, go ahead. This is the last chance you'll have, for tomorrow the idealizator of van Manderpootz goes into the Bacon head of Isaak there. I shall shift the oscillators so that the psychons, instead of becoming light quanta, emerge as an electron flow-a current which will actuate Isaak's vocal apparatus and come out as speech." He paused musingly. "Van Manderpootz will hear the voice of the ideal. Of course Isaak can return only what psychons he receives from the brain of the operator, but just as the images in the mirror, the thoughts will have lost their human impress, and the words will be those of an ideal." He perceived that I wasn't listening, I suppose, "Go ahead, imbecile!" he grunted.

I did. The glory that I hungered after flamed slowly into being, incredible in loveliness, and somehow, unbelievably, even more beautiful than on that other occasion. I know why now; long afterwards, van Manderpootz explained that the very fact that I had seen an ideal once before had altered my ideal, raised it to a higher level. With that face among my memories, my concept of perfection was different than it had been.

So I gazed and hungered. Readily and instantly the being in the mirror responded to my thoughts with smile and movement. When I thought of love, her eyes blazed with such tenderness that it seemed as if I—I, Dixon Wells—were part of those pairs who had made the great romances of the world, Heloise and Abelard, Tristram and Isolde, Aucassin and Nicolette. It was like the thrust of a dagger to feel van Manderpootz shaking me, to hear his gruff voice calling, "Out of it! Out of it! Time's up."

I groaned and dropped my face on my hands. The Professor had been right, of course; this insane repetition had only intensified an unfulfillable longing, and had made a bad mess ten times as bad. Then I heard him muttering behind me. "Strange!" he murmured. "In fact, fantastic. Oedipus—Oedipus of the magazine covers and billboards."

I looked dully around. He was standing behind me, squinting, apparently, into the spinning mirror beyond the end of the black tube. "Huh?" I grunted wearily.

"That face," he said. "Very queer. You must have seen her features on a hundred magazines, on a thousand billboards, on countless 'vision broadcasts. The oedipus complex in a curious form."

"Eh? Could you see her?"

"Of course!" he grunted. "Didn't I say a dozen times that the psychons are transmuted to perfectly ordinary quanta of visible light? If you could see her, why not I?"

"But—what about billboards and all?"

"That face," said the professor slowly.

"It's somewhat idealized, of course, and certain details are wrong. Her eyes aren't that pallid silver - blue you imagined; they're green — sea-green, emerald colored."

"What the devil," I asked hoarsely, "are you talking about?"

"About the face in the mirror. It happens to be, Dixon, a close approximation of the features of de Lisle d'Agrion, the Dragon Fly!"

"You mean—she's real? She exists? She lives? She—"

"Wait a moment, Dixon. She's real enough, but in accordance with your habit, you're a little late. About twenty-five years too late, I should say. She must now be somewhere in the fifties—let's see—fifty-three, I think. But during your very early childhood, you must have seen her face pictured everywhere, de Lisle d'Agrion, the Dragon Fly."

I could only gulp. That blow was devastating.

"You see," continued van Manderpootz, "one's ideals are implanted very early.

That's why you continually fall in love with girls who possess one or another feature that reminds you of her, her hair, her nose, her mouth, her eyes. Very simple, but rather curious."

"Curious!" I blazed. "Curious, you say! Every time I look into one of your damned contraptions I find myself in love with a myth! A girl who's dead, or married, or unreal, or turned into an old woman! Curious, eh? Yeah, damned funny, isn't it?"

"Just a moment," said the professor placidly. "It happens, Dixon, that she has a daughter. What's more, Denise resembles her mother. And what's still more, she's arriving in New York next week to study American letters at the University here. She writes, you see."

That was too much for immediate comprehension. "How—how do you know?" I gasped.

It was one of the few times I have seen the colossal blandness of van Manderpootz ruffled. He reddened a trifle, and said slowly, "It also happens, Dixon, that many years ago in Amsterdam, Haskel van Manderpootz and de Lisle d'Agrion were—very friendly—more than friendly, I might say, but for the fact that two such powerful personalities as the Dragon Fly and van Manderpootz were always at odds." He frowned. "I was almost her second husband. She's had seven, I believe; Denise is the daughter of her third."

"Why—why is she coming here?"

"Because," he said with dignity, "van Manderpootz is here. I am still a friend of de Lisle's." He turned and bent over the complex device on the table. "Hand me that wrench," he ordered. "Tonight I dismantle this, and tomorrow start reconstructing it for Isaak's head."

• But when, the following week, I rushed eagerly back to van Manderpootz's laboratory, the idealizator was still in place. The professor greeted me with a humorous twist to what was visible of his bearded mouth. "Yes, it's still here," he said, gesturing at the device. "I've de-

cided to build an entirely new one for Isaak, and besides, this one has afforded me considerable amusement. Furthermore, in the words of Oscar Wilde, who am I to tamper with a work of genius? After all, the mechanism is the product of the great van Manderpootz."

He was deliberately tantalizing me. He knew that I hadn't come to hear him discourse on Isaak, or even on the incomparable van Manderpootz. Then he smiled and softened, and turned to the little inner office adjacent, the room where Isaak stood in metal austerity. "Denise!" he called, "Come here,"

I don't know exactly what I expected, but I do know that the breath left me as the girl entered. She wasn't exactly my image of the ideal, of course; she was perhaps the merest trifle slimmer, and her eyes—well, they must have been much like those of de Lisle d'Agrion, for they were the clearest emerald I've ever seen. They were impudently direct eyes, and I could imagine why van Manderpootz and the Dragon Fly might have been forever quarreling; that was easy to imagine, looking into the eyes of the Dragon Fly's daughter.

Nor was Denise, apparently, quite as femininely modest as my image of perfection. She wore the extremely unconcealing costume of the day, which covered, I suppose, about as much of her as one of the one-piece swimming suits of the middle years of the twentieth century. She gave an impression, not so much of fleeting grace as of litheness and supple strength, an air of independence, frankness, and—I say it again—impudence.

"Well!" she said coolly as van Manderpootz presented me. "So you're the scion of the N. J. Wells Corporation. Every now and then your escapades enliven the Paris Sunday supplements. Wasn't it you who snared a million dollars in the market so you could ask Whimsy White—?"

I flushed. "That was greatly exaggerated," I said hastily, "and anyway I lost it back before we—uh—before I—"

"Not before you made somewhat of a fool of yourself, I believe," she finished sweetly.

Well, that's the sort she was. If she hadn't been so infernally lovely, if she hadn't looked so much like the face in the mirror, I'd have flared up, said "Pleased to have met you," and never have seen her again. But I couldn't get angry, not when she had the dusky hair, the perfect lips, the saucy nose of the being who to me was ideal.

So I did see her again, and several times again. In fact, I suppose I occupied most of her time between the few literary courses she was taking, and little by little I began to see that in other respects besides the physical she was not so far from my ideal. Beneath her impudence was honesty, and frankness, and, despite herself, sweetness, so that even allowing for the head-start I'd had, I fell in love pretty hastily. And what's more, I knew she was beginning to reciprocate.

That was the situation when I called for her one noon and took her over to van Manderpootz's laboratory. We were to lunch with him at the University Club, but we found him occupied in directing some experiment in the big laboratory beyond his personal one, untangling some sort of mess that his staff had blundered into. So Denise and I wandered back into the smaller room, perfectly content to be alone together. I simply couldn't feel hungry in her presence; just talking to her was enough of a substitute for food.

"I'm going to be a good writer," she was saying musingly. "Some day, Dick, I'm going to be famous."

Well, everyone knows how correct that prediction was. I agreed with her instantly.

She smiled. "You're nice, Dick," she said. "Very nice."

"Very?"

"Very!" she said emphatically. Then her green eyes strayed over to the table that held the idealizator. "What crackbrained contraption of Uncle Haskel's is that?" she asked.

I explained, rather inaccurately, I'm afraid, but no ordinary engineer can follow the ramifications of a van Manderpootz conception. Nevertheless, Denise caught the gist of it and her eyes glowed emerald fire.

"It's fascinating!" she exclaimed. She rose and moved over to the table. "I'm going to try it."

"Not without the professor, you won't! It might be dangerous."

That was the wrong thing to say. The green eyes glowed brighter as she cast me a whimsical glance. "But I am," she said. "Dick, I'm going to—see my ideal man!" She laughed softly.

• I was panicky. Suppose her ideal turned out tall and dark and powerful, instead of short and sandy-haired and a bit—well, chubby, as I am. "No!" I said vehemently. "I won't let you!"

She laughed again. I suppose she read my consternation, for she said softly, "Don't be silly, Dick." She sat down, placed her face against the opening of the barrel, and commanded, "Turn it on."

I couldn't refuse her. I set the mirror whirling, then switched on the bank of tubes. Then immediately I stepped behind her, squinting into what was visible of the flashing mirror, where a face was forming, slowly—vaguely.

I thrilled. Surely the hair of the image was sandy. I even fancied now that I could trace a resemblance to my own features. Perhaps Denise sensed something similar, for she suddenly withdrew her eyes from the tube and looked up with a faintly embarrassed flush, a thing most unusual for her.

"Ideals are dull!" she said. "I want a real thrill. Do you know what I'm going to see? I'm going to visualize ideal horror. That's what I'll do. I'm going to see absolute horror!"

"Oh, no you're not!" I gasped. "That's a terribly dangerous idea." Off in the other room I heard the voice of van Manderpootz, "Dixon!"

"Dangerous — bosh!" Denise retorted. "I'm a writer, Dick. All this means to

me is material. It's just experience, and I want it."

Van Manderpootz again. "Dixon! Dixon! Come here." I said, "Listen, Denise. I'll be right back. Don't try anything until I'm here—please!"

I dashed into the big laboratory. Van Manderpootz was facing a cowed group of assistants, quite apparently in extreme awe of the great man.

"Hah, Dixon!" he rasped. "Tell these fools what an Emmerich valve is, and why it won't operate in a free electronic stream. Let 'em see that even an ordinary engineer knows that much."

Well, an ordinary engineer doesn't, but it happened that I did. Not that I'm particularly exceptional as an engineer, but I did happen to know that because a year or two before I'd done some work on the big tidal turbines up in Maine, where they have to use Emmerich valves to guard against electrical leakage from the tremendous potentials in their condensers. So I started explaining, and van Manderpootz kept interpolating sarcasms about his staff, and when I finally finished, I suppose I'd been in there about half an hour. And then — then I remembered Denise!

I left van Manderpootz staring as I rushed back, and sure enough, there was the girl with her face pressed against the barrel, and her hands gripping the table edge. Her features were hidden, of course, but there was something about her strained position, her white knuckles—

"Denise!" I yelled. "Are you all right? Denise!"

She didn't move. I stuck my face in between the mirror and the end of the barrel and peered up the tube at her visage, and what I saw left me all but stunned. Have you ever seen stark, mad, infinite terror on a human face? That was what I saw in Denise's—inexpressible, unbearable horror, worse than the fear of death could ever be. Her green eyes were widened so that the whites showed around them; her perfect lips were contorted, her whole face strained into a mask of sheer terror.

I rushed for the switch, but in passing I caught a single glimpse of—of what showed in the mirror. Incredible! Obscene, terror-laden, horrifying things—there just aren't words for them. There are no words.

Denise didn't move as the tubes darkened. I raised her face from the barrel, and when she glimpsed me she did move. She flung herself out of that chair and away, facing me with such mad terror that I halted.

"Denise!" I cried, "It's just Dick. Look, Denise!"

But as I moved toward her, she uttered a choking scream, her eyes dulled, her knees gave, and she fainted. Whatever she had seen, it must have been appalling to the uttermost, for Denise was not the sort to faint.

• It was a week later that I sat facing van Manderpootz in his little inner office. The grey metal figure of Isaak was missing, and the table that had held the idealizator was empty.

"Yes," said van Manderpootz. "I've dismantled it. One of van Manderpootz's few mistakes was to leave it around where a pair of incompetents like you and Denise could get to it. It seems that I continually overestimate the intelligence of others; I suppose I tend to judge them by the brain of van Manderpootz."

I said nothing. I was thoroughly disheartened and depressed, and whatever the professor said about my lack of intelligence, I felt it justified.

"Hereafter," resumed van Manderpootz, "I shall credit nobody except myself with intelligence, and will doubtless be much more nearly correct." He waved a hand at Isaak's vacant corner. "Not even the Bacon head," he continued. "I've abandoned that project, because, when you come right down to it, what need has the world of a mechanical brain when it already has that of van Manderpootz?"

"Professor," I burst out suddenly, "why won't they let me see Denise? I've been at the hospital every day, and they let me into her room just once—just once,

and that time she went right into a fit of hysterics. Why? Is she—?" I gulped.

"She's recovering nicely, Dixon."
"Then why can't I see her?"

"Well," said van Manderpootz placidly, "it's like this. You see, when you rushed into the laboratory there, you made the mistake of pushing your face in front of the barrel. She saw your features right in the midst of all those horrors she had called up. Do you see? From then on your face was associated in her mind with the whole hell's brew in the mirror. She can't even look at you without seeing all of it again."

"Good—God!" I gasped. "But she'll get over it, won't she? She'll forget that part of it?"

"The young psychiatrist who attends her—a bright chap, by the way, with a number of my own ideas—believes she'll be quite over it in a couple of months. But personally, Dixon, I don't think she'll ever welcome the sight of your face, though I myself have seen uglier visages somewhere or other."

I ignored that. "Lord!" I groaned. "What a mess!" I rose to depart, and then—then I knew what inspiration means!

"Listen!" I said, spinning back. "Listen, professor! Why can't you get her back here and let her visualize the ideally beautiful? And then I'll—I'll stick my face into that!" Enthusiasm grew. "It can't fail!" I cried. "At the worst, it'll cancel that other memory. It's marvelous!"

"But as usual," said van Manderpootz, "a little late."

"Late? Why? You can put up your idealizator again. You'd do that much, wouldn't you?"

"Van Manderpootz," he observed, "is the very soul of generosity. I'd do it gladly, but it's still a little late, Dixon. You see, she married the bright young psychiatrist this noon."

Well, I've a date with Tips Alva tonight, and I'm going to be late for it, just as late as I please. And then I'm going to do nothing but stare at her lips all evening.

THE END