Gym Gems—Getting in shape for the "Miss Photoflash of 1950" contest are beauties Martha Lou Edwards, swinging Indian clubs; Peggy Smith, on the rowing machine, and Jean Brooks, on bicycle.

George Cooper, The Creator Spent 40 Years Building, Fixing

In a wing of University College, close by the Soldiers' Tower and looking out on the Hoskin Avenue playing field, is a quiet old-fashioned workshop. In the workshop for 30 years (and on the staff of the University of Toronto for 41) was quiet, competent George C. Cooper.

George Cooper spent his entire time building or fixing up different kinds of apparatus. He put together from scratch such varied items as snowplows and rat mazes. He made twenty electric clocks, before such were on the market.

George Cooper's official title was "technician." The words "technician" and "mechanician" are used interchangeably to apply to men whose job it is to turn out equipment for student labaratory use or for research or just for the maintenance of University property. Usually the objects are modelled on a sketch by a professor. They are the kind of object that can't be purchased anywhere. Their fabrication requires ingenuity, and the ability of someone who is an inventor every day of his life.

Two major qualifications made George Cooper an outstanding technician. First was his training. He served his apprenticeship in a small shop in Gravenhurst, Ontario, where he started by sweeping floors and helping the blacksmith. Gradually he started working in the machine shop and the general repair shop. He was there for three years.

The second qualification was a natural creative ability.

During his first eleven years at the University, George Cooper was attached to the general maintenance staff. He fixed potato peelers and ice cream machines. He did innumerable jobs for members of the academic staff. Dr. C. A. Chant, then head of astrophysics, wanted a miniature set of planets to show relative sizes. Cooper made them and mounted them ("the earth was a little wee thing"). He also made a 24-inch celestial globe of brass wire, a complicated affair.

He made the first snowplow used on University grounds. Year after year it was put to work bucking snow drifts until five or six inches had been worn off the boilerplate that Cooper had turned into the actual blade of the plow. He also put together the first carts used for collecting leaves in the fall. Bit by bit, George Cooper's handiwork started popping up all over the campus.

He never let himself get stale. "I've been a kind of student all through my life," he said a few weeks ago. He took a correspondence course in machine design and mechanical engineering, and for two years he took mechanical drafting at a technical school. Meantime, he made keys and locks and a rotary turntable for a copy of Venus de Milo. He constructed a large machine for picking up display cases and moving them bodily to another part of the Museum.

When the first World War was underway, George Cooper entered one of the most constructive phases of his work as a technician. Professor E. A. Bott (then Captain Bott) had nine men working under him in Hart House, operating a civil reestablishment centre for veterans. Cooper was called in to construct devices to help disabled veterans get over their disabilities. One of the things that Cooper made is typical of the kind of work he did at that time. Captain Bott wanted an apparatus that would help veterans who had lost a leg make use of the stump as a preliminary to further rehabilitation. For him, Cooper bored a hole in a large bowling ball. A cable could be attached to the stump from which hung a pin that could be inserted in the bowling ball and held by a spring attachment. The veteran could then swing the bowling ball, and let go of it at the strategic time—actually bowling with the stump of his leg. A bowling alley was set up. The scheme was eminently successful.

During the last war, George Cooper constructed a recording device for R.C.A.F. Link Trainers. He also rigged up a swing which the air force used as an air test for recruits. The swing was operated by hand until Cooper powered it with electricity.

The twenty electric clocks that were a product of Cooper's talent were put together from bits and pieces. Only the dials and the hands were bought. The clocks were distributed here and there in the University There was a master clock and a big drum punched with 900 holes. Pins passed over the drum and settled in certain holes at certain times which rang bells in different buildings. It was quite an operation. "Taking them all round, the clocks did pretty well," said Cooper modestly.

The Cooper workshop was filled with machines he had set up himself—machine and wood lathes, a milling machine, a planer, a band saw, and drill presses. All this machinery was taken over by Jack Clark, who succeeded Cooper last June.

During the thirty years he worked for the Department of Psychology, George Cooper became mildly interested in the subject which was the basis of his labours. "I used to read certain books on psychology, but sometimes I don't think I learned a great deal," he commented. He made rat mazes and perimeters and most of the gadgets that fill the psychology laboratory in the Economics Building on Bloor Street. In recognition of his work, the Department of Psychology presented him with a fine engraved gold watch when he retired. George Cooper had a true sense of humour. "It would spurt out of him all at once," a friend says. He was easy-going, people liked him, but he minded his own business. He lived a regulated but busy life. He liked going on motor tours with his wife. The Cooper's only son is a paymaster in the Toronto Police Department.

Music was a dominant force in George Cooper's life. At 14 he played a bass horn in a band. He played various instruments in boys' bands and later in regimental bands. "I can't claim any brilliance about my playing," he said, "but I managed to get away with it." He also enjoyed singing. He sang in the National Chorus and was a charter member of the Canadian National Exhibition Chorus. "I don't know how many church choirs I've been in," he remarked.

His work made him a philosopher. From time to time people would ask him to make gadgets that he knew wouldn't work. Nevertheless he would follow the ideas of the man who gave him the job. But he would come home to his wife and remark that he had been "planting the cabbage upside down, and if it doesn't grow, well all right."

George Cooper's mechanical ability was evident when he was young. He made himself an ice boat and a pair of speed skates. The speed skates were 16 inches long, and deadly. They were designed along new lines, and he won everything in sight with them. There used to be some hot disputes by speed skating committees as to whether George Cooper should be allowed to use his dangerous new skates. But he not only won the argument, most of the time, but also the race.

In October 1949, a heart condition from which George Cooper had been suffering grew worse and he was taken to hospital. On October 18th he passed away.

—From The Varsity Graduate.

True Chivalry

At a dinner party the hostess, during a lull in the conversation, gave a loud and rasping hiccup. A Frenchman sitting by her, immediately apologized as though he had committed the faux pas.

When the women had left the dining-room an American asked the Frenchman why he had acted in this manner.

"Ah, monsieur, we are a chivalrous people," was the reply. "I saw that the lady was embarrassed, so I tried to turn the blame to myself."

Presently the men joined the women. After a while the American found himself in conversation with his hostess in the middle of a group of guests. Suddenly the hostess hiccupped again. This time the American turned to the guests and said: "Say, folks, this one's on me!"

Old Bible Edition—Dr. Nelson Glueck, president of the Hebrew Union College holds the newest addition to the school's rare book collection. It is a "limited edition" of the Pentateuch, the first five books of the Bible, which was printed 1842.

Quickest way to balance the household budget would be for the neighbours to stop buying things we can't afford.

Surrealist Exhibits Work—Salvator Dali, famous surrealist and mystic painter, displays his painting of the Madonna, which he showed to the Pope during a recent visit. Arriving in this country a short while ago Dali brought four other paintings to exhibit in New York.

Winston's Come-Back

A Brisbane man, who served as a young soldier in the Aldershot Command fifty years ago, told Australians this little-known story of Winston Churchill the other day:

The ex-Premier was then a young subaltern. One day, after travelling on duty, he submitted an out-of-pocket expenses account to the paymaster. Among the items was "Porter, two shillings."

The paymaster sent Churchill a memo, instructing him to use the word "porterage" in future and never "porter."

Churchill at once replied: "I have noted the contents of your memo. When hiring a cab, should I also itemize the expense as 'cabbage'?"

These Lady Drivers

A woman drove into a service station to complain that her car was using up too much gas. The attendant pointed to the choke lever which protruded from the dashboard. "Do you know what this is for?" he asked. "Oh, that," said the woman airily. "I never use it, so I keep it pulled out to hang my handbag on."

The Annual Meeting of Shareholders
The Royal Bank of Canada

Programme for Trade Recovery Calls for Exchange Stabilizer

Canada's reputation, achievement and strength offset anxieties caused by world conditions—development of resources, increased population and foreign trade needed

A five-point programme for world recovery was a feature of James Muir's Presidential address at the Annual Meeting of shareholders of The Royal Bank of Canada. Mr. Muir also stressed Canada's economic development and her continuing role in world economy.

Reviewing international currency experience during the 19th and 20th centuries, Mr. Muir referred to the stability of sterling before 1914. "Several important factors contributed to the enduring dependability of the sterling standard. First, debtor nations accepted exchange parities which they were able to maintain through relatively small adjustments of prices and money incomes. Second, debtors were willing to accept the discipline of the gold standard and to acquiesce, under the rules of that standard, in the price and income adjustments which their trading position required. And third, the world's creditor, Great Britain, made additional sterling available through the vigorous international lending of her financial and business community and the free trade policy of her government.

COMBINE PAST, PRESENT

"In meeting any emergency we must combine the lessons of the past with inventiveness and imagination in the present. In the past, as in any relatively normal period, responsibility for international economic stability was divided between the creditor and debtor countries of the world. But, in the period immediately following the second world war the primary responsibility lay with the creditors; and in meeting this responsibility, the United States and Canada embarked on an unprecedented program of loans and gifts to the war-torn countries of Europe . . ."

"The nations of Europe, through their own efforts and with the help of loans and gifts from abroad, have built up their production to the pre-war standard. Further progress in production would be immensely beneficial, but the immediate problem has become not production as such but efficient production. In other words, we are back to normal times again in the sense that the old problems of competition in international trade, such as costs, prices, and salesmanship, must once more be met. Under these conditions, we still need the inventiveness and imagination which have helped debtor and creditor countries by co-operative effort to progress as far as they have along the road to world recovery. But we need also to restore as nearly as we can the favorable economic environment that made international stability possible in the golden age of the sterling standard . . ."

THE CANADIAN ECONOMY

Mr. Muir discussed the Canadian economy in 1949 under four main heads: "(1) Canada's reputation, (2) Canada's record, (3) Canada's weakness, and (4) Canada's strength.

(1) **Canada's Reputation.** Mr. Muir pointed out that among foreign observers "Canada is at once the bulwark of free enterprise, and a model of wisdom of government regulation; the possessor of an admirable private banking system and of the best practice in efficient Central Bank control: the stronghold of a sound conservative tradition and the home of interesting experiments in political and economic order."

"We don't have to be too modest, at least among ourselves. We can spare ourselves an inferiority complex and the abnormal national behavior to which it may give rise. As a nation, we have accomplished much; not all of it is good, but the power for good is there; and in 1949, as in previous years, our good repute is, in large measure, supported by our record."

(2) **Canada's Record.** Mr. Muir briefly summarized Canadian business conditions in 1949. The year saw "a further increase in Canada's industrial plant and equipment, the maintenance of the high levels of consumption attained in 1948, and the over-all expansion of the net and gross national product beyond the record levels of a year ago." He noted too that "Canada is one of the few countries today that can still boast a substantial budget surplus. This not only contributes to stability, but it turns prosperity to good account by improving the credit of the government."

(3) **Canada's Weakness.** Mr. Muir referred in some detail to Canada's export position and her vulnerability to the current unbalance in international markets. After summarizing Canada's trade in 1949, two main conclusions were stressed: "First, our over-all surplus with the world is dwindling; and, second, our direct earnings of dollars through exports to the United States is becoming relatively more important than our indirect earnings of dollars through trade with U.S.-financed Europe."

Mr. Muir referred to the danger of losing established markets in Europe but "the continued failure of our overseas customers to earn sufficient dollars, through trade and investment rather than through gifts from the dollar area may force us to realign our trade. That is, we may have to contemplate the contraction of traditional markets in Europe offset to some degree by increased sales to the dollar area."

"The least transferable of our major exports overseas are wheat and wheat flour." In this case, he pointed out, "shifting is difficult owing to large exportable surpluses of these products within the United States. To finance wheat exports through new loans to the United Kingdom would mean a return to our lending policy of 1945-46 and a return to our dollar-short position of 1947."

"The most favorable development in our world trade would be an increase in our imports from Europe and especially from the United Kingdom, or increased dollar earnings by these countries in their trade with the United States."

"To attempt this shift through further curbs on imports from the United States would be a move backward to more rigid exchange controls with all the disadvantages of such a move for ourselves and for the world economy. Fortunately, the recent devaluations have provided some incentive for precisely the shift we have in mind without an increase in controls . . ."

"The plain truth is that Canada's domestic prosperity depends upon our handling of a complicated foreign-trade problem. And in the final analysis both our domestic prosperity and the future of world trade itself will depend upon a concerted international effort by all nations to return along the path we outlined earlier; that is, along the path to multilateral world trade unhampered by exchange restrictions, bilateral pacts, and all the paraphernalia of government control."

(4) **Canada's Strength.** "It is refreshing to turn from Canada's difficulties in the next few months to her prospects over the next few years, or better still over the next decade and many more to come. We have the essential elements that need only a little time to bring about an enormous increase in our national wealth. These sources of economic strength are our natural resources and the temper of our people.

"Canada's scarcest natural resource is her working population. Here, as with our forests, mines and oil fields, we must practise conservation through the wise and economical use of what we have. But to parallel our new discoveries and to ensure their full and efficient use we must embark on a bold policy of immigration. In this way we can increase the quantity of the one resource that is in short supply. In this way we can remove the one factor that sets a present limit to the growth of our natural wealth. Against this prospect the few hundred millions of U.S. dollars that measure our present dollar difficulties pale to insignificance."

"This prospect of economic independence does not mean a reduction in trade. We do not have to turn our backs on the interdependence of nations that accompanies international commerce. Trade among independent, industrially developed countries is the most profitable trade of all. The world is gradually moving away from trade between industrialized countries and under-developed areas, away from trade that requires colonial dependence, to trade among industrial equals. And in this evolution of world economy, Canada is at present leading the way."

In the development of Canada's natural resources, their use by a larger population, and the exchange of her increased industrial output in "an expanding and enriched foreign trade," Mr. Muir saw "an effective guarantee that Canada shall achieve an assured and pre-eminent place in the economy of nations . . ."

PRESIDENT ADVOCATES FIVE STEPS TOWARD WORLD TRADE REVIVAL

Devaluation has at least broken the log jam; but we must take immediate advantage of this initial break in the barriers to trade which have been thrown up by overvalued exchange rates and rigidly held in place by government controls.

The steps, in my opinion, are as follows:

First, nations of the world should re-learn a basic lesson of the first world war, and settle their war debts . . .

Second, for a certain fixed period, we should let the market determine rates of exchange, as it did immediately after the first world war . . .

Third, at the end of this period of free-market valuation, we should stabilize currencies by reference to the rates which the free-market has determined . . .

Fourth, having stabilized exchange rates at the level decreed by the free market, the world must adopt some device to keep them that way . . . The gold standard kept nations within their means before the days of the great illusion that international equilibrium can only be achieved by clamping the fetters of exchange control upon free international trade . . .

Fifth, the gold standard (or its equivalent) must be made to work by the proper discipline not only of debtor but of creditor nations as well. This means a return to the two basic requirements of responsible creditor nations: vigorous international lending and free trade.

General Manager Reports Assets, Deposits Are Up

Mr. T. H. Atkinson, General Manager, reviewed the 1949 Annual Report and stated that the bank's assets had risen by $112,498,000 during the year to $2,334,985,000 and that liquid assets constituted 76.27% of the total liabilities to the public. Commercial loans had also increased. Mr. Atkinson reported deposits at a new all-time high of $2,192,140,000, an amount two-and-a-half times that of 9 years ago. The number of deposit accounts totalled nearly 2,000,000, which included more than 1,500,000 savings accounts in Canada. An increase of $1,400,810 in profits over the previous year was noted by Mr. Atkinson and after providing for the customary deductions, including taxes of $4,435,000 and dividends for shareholders, there was a carry forward in Profit and Loss Account of $3,860,313.

IMPROVED FACILITIES

Referring to the provision of new premises, Mr. Atkinson said: "Since our last report eleven new branch offices have been constructed at points where facilities were inadequate and where extension of existing premises was impracticable, and at forty-six other points improvements and extensions of a major character have been completed . . . In order to better serve the public in districts which are expanding we opened twelve branches and six sub-branches in Canada. At the year-end we were operating 665 branches in Canada and 62 abroad."

SERVICE TO TRADERS

Mr. Atkinson stressed the role played by the Royal Bank's 62 branches abroad in facilitating foreign trade. "For well over a quarter of a century we have operated an extensive chain of our own branches in foreign countries; in fact, at certain points we have been established for over half a century, and as at November 30, 1949, we had 62 offices which included representation in the key cities of the major South American Republics, throughout the Caribbean area and, of course, we are established in London, England, and New York City, and our affiliate operates in Paris, France . . ."

"The widespread chain of branches coupled with our extensive correspondent relations throughout the world serves as a constant source of statistical and other information including import and exchange regulations which otherwise might not be readily available to us, and our central bureau in Head Office is thus in a position to give up-to-date and complete information to Canadian companies and others having under consideration establishing business relations with clients abroad. We firmly believe that through helpful information given to Canadian businessmen our foreign organization will continue to serve a most useful purpose to Canada in the development of markets abroad for surplus goods."

PROUD OF STAFF

A warm tribute to the bank staff was paid by Mr. Atkinson. "There's nothing this Bank is prouder of than the quality of its personnel. Within every officer, I believe, there is a fine sense of pride in this great institution—pride not only in its achievements and its pre-eminent place in Canadian and world banking, but pride, too, in its being a good place to work. The executive, supervisors and branch managers have all travelled the long road of apprenticeship within the Bank; they talk the same language as the young people who are following the same route, and they are united in trying to make working conditions as pleasant as possible . . ."