HAMILTON ON DISPLAY IN CHICAGO AND NEW YORK SHOWS

# Timely



Topics

REMEMBER THE **HAMILTON** FAMILY PICNIC ON AUG. 2. BE THERE. HAVE FUN.

July 31, 1947

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Vol. 5, No. 6

# HAMILTON FAMILY PICNIC ON AUGUST 2

#### JAKE HOAK SAYS SO LONG TO DIALERS

Jacob I. Hoak after 46 years at Hamilton said so long to his Dial Department mates the last week in June.

Jake was a well liked member of the top floor department and it was with a lump in his throat that he stepped into retirement.

As farewell gifts the members of the Dial Department presented Jake with \$35.00 and a carton of Camels.



JACOB I. HOAK

"It's pretty tough to say good bye to such a swell bunch of peo-ple," Jake said. "In 46 years I re-ceived a lot of pleasure from work-ing among them. It'll take a little time to become accustomed to not

time to become accustomed to not getting up every morning and coming to work."

Jake, who worked all but nine months of his 46 years in the Dial Department, operated a machine for opening and blocking enamel dials. His hobbies are carpentry work, truck farming and playing penny ante.

#### H. M. A. PICNIC TO BE HELD AUGUST 16

The annual Hamilton Management Association picnic will be held at Wheatland Park on Saturday, August 16.

A combined Social and Recreational committee consisting of last year's members and those newly elected for the 1947–48 term are making extensive plans for the affair which is expected to draw the entire membership of 255 employees to the day of fun.

the thembership of 255 employees to the day of fun.

The committee in charge is composed of: Ken Weeks (Personnel), W. W. MacIntyre (Machine), Paul Rodgers (Cafeteria), Robert Gunder (Adv.), Russell Markert (Bal. Staff), Frank Christoffel (Office Mgr.), Harold Schafer (Spec. Mfg.), Ephriam B. Fornoff (T. & C.), John H. Ganse (Quality) and William Marks (Automatic) all members for the 1947–48 term plus Joe Gegg (Prod. Con.), Wyn Davis (Dir. Planning), Charley Miller (Train), Sam Evans (Bal. Staff) and Abe Burkhardt (Service) from last year's committee.

# H.M.A. COMMITTEES NAMED FOR 1947-48

#### 27 Members Appointed To Posts on Five Committees

Twenty-seven members of the Hamilton Watch Management Association were appointed to five committees for the 1947–48 Association season.

committees for the 1947-48 Association season.

The Program Committee is composed of: George T. Wolf (Finishing), Charles E. Hoin (Plate), James M. Rice (Friction Jeweling), Robert Waddell (Advertising), Lowell Halligan (Mdse. Mgr.), Fred Hauer, Jr. (Prod. Con.) and Richard Slaugh (Assem. Res.).

The Social and Recreational Committee is made up of: Ken Weeks (Personnel), W. W. MacIntyre (Machine), Paul Rodgers (Cafeteria), Robert Gunder (Adv.), Russell Markert (Bal. Staff), Frank Christoffel (Office Mgr.), Harold Schafer (Spec. Mfg.), Ephriam B. Fornoff (T. & C.), John H. Ganse (Quality) and William Marks (Automatic). tomatic)

tomatic).

The Attendance Committee consists of: John Foose (Watch Assem.), Fred Boulton (Export Mgr.)
D. C. Connor (Eng.-Process Plan.).
The Membership Committee is composed of: John Owen (Personnel), Fred Walzl (Acct. Payable), Roland P. Bitzer (Engineering), Harold Quickel (Quality) and James S. Goddard (Dial).

The By Law Payisian Committee

The By-Law Revision Committee is made up of: Arthur B. Sinkler (Quality), Harry L. Hovis (Works Lab.) and Clayton F. Erisman (Service).

(Service).

The Social and Recreational Committee will start operating immediately on the H.M.A. picnic planned for August 16, while the other four committees will begin functioning in Sentember. in September.

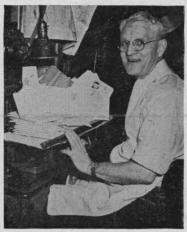
## **ED SHAY RETIRES** AFTER 47 YEARS

The week of June 23 was crowded with big events for likable Edward F. Shay, gold numeral set-up man in the Press and Plate Department.

On the 24th he was 65 years old and received a cake and 26 envents on the pressure of the pressure of

and received a cake and 26 envelopes, each containing a handker-chief and a card from every mem-ber of the department.

On the 26th he retired after 47 years with this Company and the department presented him with



ED SHAY

Ed started with Hamilton on July

Ed started with Hamilton on July 21, 1900, in the Balance Department. He worked in that section until 1929 when he was transferred to the Press and Plate Department where he has been working up until the day of his retirement.

"Forty-seven years passed quickly," said Ed doing a bit of recollecting. "Now that I'm retired, I'll bet the first couple days I'll be getting up in the mornings and starting for work. I'm really going to miss my pals in the Press and Plate Depart-

#### DANCING, AMATEUR SHOW, SOFTBALL, RIDES AND OTHER CONTESTS TO BE HELD AT ROCKY

ment. They are a mighty swell bunch of people."
Ed's hobby is sports—all kinds of sports. He admits his favorite is baseball and in his younger days he used to be quite a third baseman. He has a puffed finger which was broken in 1901 to show for his experience on the diamond. That's the year he held down the hot corner for the Hamilton A. C. corner for the Hamilton A. C. About the same year, Ed managed the Hamilton A. C. football team.

Now that he is a No. 1 sports follower, he takes regular "look-ins"

follower, he takes regular "look-ins" on all sorts of sporting events.

Ed passed a timely tip to all employees, particularly new ones, which he found through 47 years worked like a charm for him. It is this: "You've got to put something into your work if you hope to get it out. Be honest at all times and help your fellow man."

Ed had this to say about the Hamilton Watch Company. "I've enjoyed every minute of my 47 years association with the Company.

years association with the Company.
The Hamilton product will always be uppermost in my mind. When the best is made, Hamilton will make it."

#### HAMILTON ON DISPLAY IN CHICAGO AND N. Y.

#### An Estimated Crowd of 20,000 Jewelers Expected At 2 Shows

"What Makes a Fine Watch Fine" is the theme of the Hamilton Watch Company booths at the two jewelry exhibits slated for Chicago and New York this year.

On July 28, 29, 30, 31, a double booth set-up of Hamilton's current merchandise along with many technical illustrations of Hamilton's superiority such as transparent models of Hamilton watches etc. will be on of Hamilton watches, etc., will be on display at the National Association of Credit Jewelers show at Chicago's Hotel Stevens.

The Hamilton booths for this exhibit will be handled by the Hamilton sales staff from the Chicago office along with several Hamilton officials from the factory.

On August 11 to 14, a triple Hamilton display will be on exhibit at the American Retail Jewelers Association show at the Waldorf-Astoria in New York City.

Practically the same Hamilton exhibit used in Chicago will de displayed in New York with several Hamilton officials from Lancaster in conjunction with the New York sales staff of "America's Fine Watch" handling the exhibit handling the exhibit.

The largest crowd in the history the jewelry industry—an estiated 20,000 jewelers—are expected witness these two shows.

The big event of the year, the Hamilton Watch Company Family Picnic, sponsored by the H.R.A. will be held on Saturday, August 2, at Rocky Springs Park.

The park will be turned over to Hamilton from 10:30 A. M. to 5:30 P. M.

Your \$1.00 contribution for this year's picnic entitles you to bring your wife, husband, girl friend, boy friend and your family free of charge.

charge.

After identification tags are is sued to you and identification cards to each of your guests, your \$1.00 contribution continues to pay dividends in free rides on the wildcat, merry-go-round, airplanes, bumping scooters, miniature railroad and fun house as often as you desire

ing scooters, miniature railroad and fun house as often as you desire during the day. It also allows the individuals wearing identification cards to use the swimming pool as often as they desire.

For those who like to dance, Bob Lyter's orchestra will furnish music in the ballroom from 2:30 to 5:30 P. M. There will be an amateur show with talent furnished by the employees in the band shell and a softball game. There will be games for the kids and grownups with prizes awarded.

or the kids and grownups with prizes awarded.

The committees in charge of the various events are going all out to make this year's picnic the finest in the history of the company.

Last year at the first post-war picnic, approximately 1200 Hamilton employees families and friends.

ton employees, families and friends attended. This year the H.R.A. would like to see that number

Remember the date, AUGUST 2. BE THERE AND HAVE FUN.

#### WEEKS ON B.P.O. ELKS CRACK DRILL TEAM

Ken Weeks (Personnel) was a member of the crack Lancaster B.P.O. Elks No. 134 drill team that

B.P.O. Elks No. 134 drill team that won the National Sweepstakes drill team honors at the 83rd convention of the order held at Portland, Oregon, on Tuesday, July 15.

The Lancaster team consisting of twenty-one men plus the drill master, Gilbert Bowers, scored 90 2/3 points to beat out the Pasadena, California, outfit who scored 89 2/3 points to take second and win the Pacific Coast trophy.

Ken has been a member of the team for a number of years.

In 1939 the Lancaster team won top national honors at the St. Louis

top national honors at the St. Louis convention.

Kenny and his mates left the Reading Airport on Saturday morn-ing, July 12. They arrived back from Portland on Saturday, July 19.

The Hamilton booths to be used in these two shows were built by the Adv. Display Department here at the factory.

# CHOW TIME IN JUNE



A bunch of the boys were chewin' it up at the grub table when this shot was taken by Charley Miller at the annual Train Department Outing on June 21 at the Miller Summer Hacienda located along the Bausman Road. That isn't a moon coming over the mountain on the extreme right. That's Fred H. The entire group at the affair consisted of 30 cook honors being ably handled by "Brother"

Research Ce

TIMELY TOPICS

NUMBER 6

The Hamilton Watch Company Employee Newspaper

EDITORIAL BOARD

Wallace Bork, Chair., Prod. Control J. Ed. Miller, Case Order Division

Margaret Shade, Chem. and Met. Res. Hazel Keller, Case Office

SLATED FOR AUG. 4

The 1947 Hamilton Recreation Association Tennis Tournament will get underway on August 4 with play in the Men's singles and doubles and Girls' singles on the Hamilton courts across the highway at the Barr Lot.

Ken Derr (Eng. Services) is chairman of the committee in charge of the event. All entries should be sent to him as promptly

as possible. The remainder of the committee consists of: Gene Barber (Dial & Mat'l Stores), Earl Eshleman (Sm. Tool), Julia Heida (Prod. Con.) and Carl Yecker (Eng.

Murray Gould (Pat. Atty.) is the

Murray Gould (Pat. Atty.) is the defending champion in the Men's singles event, while Carl Yecker and Earl Eshleman will attempt to defend their 1946 doubles title.

After a lapse of a year the Girls' singles returns to the docket. Lack of entries last year kept the event sidelined

The rules of the tournament are

The winner will be awarded the

The winner will be awarded the new balls, the loser those used in the match. Tennis balls will be on sale at the courts—3 for \$1.25.

Three set matches will be played up to and including the semi-finals. The finals will be a five set match. All disputes will be referred to committee members or members present at the courts.

present at the courts.

few and simple. Each player (or in the event of doubles, each team) is to have a set of three tennis balls.

sidelined.

EDITORIAL STAFF

General News and Production, Charles H. Frey Personnel Consultant, R. A. Preston Cartoonists, Charles Shindell, Jr., and Herbert Mussleman

PHOTOGRAPHS IN THIS ISSUE

Timely Topics is indebted to the following people for photographs in this issue: Charley Miller, "Chow Time in June"; Francie Meyer, "Dance Group."

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LANCASTER, PENNSYLVANIA-JULY 31, 1947

# Your Association

A few comments are timely concerning an organization located on the premises of the Hamilton Watch Company that is managed and oper-Company that is managed and operated entirely by the employees of this company. No aid is given to this association by the company with the exception of the space they occupy. The work and activities daily performed are a credit to the association directors that have been elected by Hamilton employees. This association is the Hamilton Watch Employees' Federal Credit Union.

It was only a few years after the severe depression of the early '30's, October, 1936, to be exact, that the Hamilton Employees' Credit Union Hamilton Employees Credit Union
was organized with the objective
of promoting cooperative thrift and
loan facilities for its members.
One purpose of the association is
to furnish small financial loans to
employees on the basis of their payroll identity, and in this objective

roll identity, and in this objective they have certainly succeeded when it is realized that since its incorporation a total of \$502,740.68 in loans has been made to employees.

Many employees have thought of

Many employees have thought of their Credit Union as being only a loan agency, but this is far from the truth when it is realized that over 1000 employees are members and are using the payroll deduction plan for systematic savings. Many employees have objectives in having each week or month certain amounts deducted from their paycheck such as saving for future homes, automobiles, etc. Others save to see that a son or daughter secures the educational opportunities they have planned for them. Another function the Hamilton Watch Employees' Federal Credit Union performs is the selling of U. S. SAVINGS BONDS for the Treasury Department. This authority was given to your association

ity was given to your association by the Federal Reserve Bank of Philadelphia, and to date \$1,809,775 worth of bonds have been sold at Hamilton!

The purchase of U. S. SAVINGS BONDS, is saving, as distinguished from buying, for you cannot "spend" money on bonds—they actually cost you nothing since you merely take these interest-earning securities from your Government—in place of dollar bills which do not earn any

interest.

A member's interests in the Hamilton Watch Employees' Federal Credit Union is protected to the fullest degree since an annual audit is made by the Federal Bank examiners and quarterly the local Supervisory Committee also audits the accounts of the association. No irregularities have ever occurred in the records of your association, but the records of your association, but only praise as to the enviable rec-ords that they have maintained in all financial dealings conducted with the members.

Hamilton employees can be proud Hamilton employees can be proud of the various officers and directors to which they have entrusted their association's leadership, and to the many new employees that are now with the company, attention is directed to the facilities that their own fellow workers have established for their welfare and convenience.

#### MEYER PIONEER IN RADIO BROADCASTING

Long before Bing Crosby, Frank Long before Bing Crosby, Frank Sinatra or Perry Como ever thought of crooning for a career, Francie Meyer (Watch Design), a tenor in the Hamilton Chorus, was pioneer-ing in the field of radio. It was back in 1920 when Francie

was a designer in Engineering at Westinghouse in Pittsburgh that Dr. Frank Conrad, Assistant Chief Electrical Engineer at Westinghouse, conceived the idea that wireless could be applied in such a fashion that you could have radio in the



FRANCIS MEYER

As a result of Dr. Conrad's experiments, a small broadcasting booth was built on the roof of the Engineering Building where Francie

the Westinghouse Chorus and possessing a clear, well developed voice, was called up to the booth many times by Dr. Conrad to sing over

These broadcasts were personal ones conducted by Dr. Conrad for his friends and those interested in his idea.

It wasn't long before the booth on the roof was assigned call let-ters. Those call letters, KDKA, were soon to become well known as

Thus Francie became one of the first broadcast singers in the United States. The privilege and pleasure Francie derived from his pioneer-ing efforts in radio, he cherishes

Francie, being a tenor soloist with

Pittsburgh's leading station.

After the experimental stages of Dr. Conrad's idea was put across, KDKA began with regular programs and Francie became one of the station's leading tenors for five years.

Thus Francie became one of the

very fondly.

# Joe Walkaround

Understand that FRANCES DRIESBACH (Personnel) is becoming Understand that FRANCES DRIESBACH (Personnel) is becoming quite some driver . . . The road is now beginning to turn when she does . . . A lady with a hundred and five foot waistline is still the No. 1 Glamour Gal with Americans . . . She's the Statue of Liberty . . . KEN DERR (Eng. Services), the bridge painter, decided he could make faster progress in pursuit of his hobby on a motor bike, so he traded in his "slow wheel" for one . . . The PETERS SCHOOL OF HOROLOGY, Washington, D. C., toured the factory on June 17 . . . The group consisted of 20 students including the supervisor of the school, WILLIAM N. PETERS . . . There's a new tune out entitled, "I'm A Lonely Little Petunia In An Onion Patch" . . . That false alarm up in Train on June 19 created auite a bit of excitement. quite a bit of excitement.

An Onion Patch"... That false alarm up in Train on June 19 created quite a bit of excitement.

There's nothing quite so deserted looking as a "manless" department which got that way because of a week's vacation June 26 to July 7 ... JIM HEIDER (Time & Motion) got himself married to ELLEN DRACHBAR on June 8 in his home-town of JOHNSTOWN, PA... ELLEN is a local gal... PHIL WENDEL (Spring Rm.) is braggin' all over the premises about his dept's softball team in the Inter-departmental League... DON SMITH (Machine Exp.) sez IRA FICKES of the same dept. is a pretty good target shot... The new male in the Advertising Department is PAUL McGEEHAN... He sez you can just call him RED... BETTY BADORF (Statistics) is now MRS. PAUL L. LILLER... The middle aisle amble took place in the REDEEMER LUTHERAN CHURCH this City, natch... The couple "mooned" at Ocean City... Another boat owner is RAPID ROBERT RAVER (Budget)... He has a 16 foot sailboat anchored in a Maryland port... PAUL RODGERS (Cafeteria) was once a fireman on the PENNSY... Aside to JOHN OWEN (Personnel): What's MR. FINNEGAN'S phone number?... Production Controllers FRANK REMLEY and FRED HAUER, JR., issue a toe and heel challenge to ART ZAHM, retired HAMILTON member... PAUL SEIBEL (Sales) passed the candy on June 16 for his "21st birthday"... RAYMIE FRITSCH (Maintenance), the push behind the power-mower, sez when he's walking fast he passes the mower and then has to stop and wait for it... HENRI VERMOT (Styling) has a new dog answering to chow call as PRINCE... MARGARET KELLER (Chem. & Met. Res.) became the bride of HARRY E. SHADE, JR., on June 1 at GRACE LUTHERAN CHURCH... The couple honeymooned through the New England States and Canada... The three Johnnies, LANDIS, LAPP and MILLER work together in the packing section of the TRAFFIC DEPT... Thanks for the note RALPH GRETH of the same dept.... Ever get jug tryin' to walk through the hedge along Columbia Avenue?

BETTY MARTIN, who used to work out of the CASE ORDER DEPT., Columbia Avenue?

BETTY MARTIN, who used to work out of the CASE ORDER DEPT., is now located as a secretary in the SALES DEPT. . . . A June event that brought out plenty of excitement and caused quite a bit of speculation occurred in a tree outside of the MACHINE EXPERIMENTAL DEPT. where a raccoon slept for a morning and an afternoon . . . Some onlookers figured it was some youngster's pet . . . Others thought it might have come in from the county for a job . . . It's a cinch it's the first time anything ever got past the guards at the gate without signing up. signing up.

How about those freshly painted green benches throughout the campus? . . . They really dress the grass up . . . Isn't it true that the most popular thing in a bottle during vacation was sunburn lotion? . . . PAT WEISMAN (Personnel) sez she can't stand squeeky shoes . . . BILL CAREY, a new hand in the Personnel Training Dept. fresh out of CARNEGIE TECH, sez there's only one thing wrong with sleeping, next to getting awake, and that is dreaming . . . BILL sez he gets the worst kind of dreams and when he wakes up in the morning he's all tired out from directing Army tours or climbing mountains, etc. . . . ROY SHELLY (Guard) is of the opinion that you can't fish for bait on Sundays . . . Hey, ROY, to be sure why don't you ask WALT RATHKEY (Mat'l Stock) He's a Game Warden . . . JOE GEGG (Prod. Con.) looked quite youthful in that sports shirt he was wearing during inventory week . . . Did you know that ED SHAY and JAKE HOAK, who both retired the last week of June after working 47 and 46 years respectively at HAMILTON, used to live aside each other when they first came to work here . . . Practical jokers are all right in their places, but the top JOE JERK is the guy who slaps another fellow on a sunburned back and then wonders why several of his teeth are loose after he lands the slap.

Two new members of the Advertising Department are SHIRLEY

Two new members of the Advertising Department are SHIRLEY PHILLIPS and SUZANNE McCAULEY . . . TERRY PISANI no longer works in that department . . She's headed for California and a trip to the altar . . . Apologies are in order for FRANK BITZER (Tabulating) and BEN HUMMEL (Watch Design), the secretary and treasurer respectively of the HAMILTON MANAGEMENT ASSOCIATION for the 1947-48 terms whose names were omitted in the story we ran in the June issue on the new officrs of the HMA . . . WALT DUTTENHOFFER (Maintenance) sez he goes fishing down in Maryland where the catch is always bigger . . . Maybe that's where he picked up that "you all" business he tosses at you . . . Another guy taking golf lessons is TED FRANKLIN (Sales) . . . FRANK KOZICKI (Tab.) informs us that all the ad space on his nude pate has been bought up . . . KEN TREES (Insp.) wants it known that he picked 75 quarts of sour cherries and not once did he suffer nose bleeds from the high altitude on the ladder . . . JERRY VERNON (Guard) sez the biggest giggle he ever cut loose with was the night he went to the Purple Derby night pub in Atlantic City with an ex-pug . . The pug not only brought down the house but the proprietor offered him ten bucks to leave the joint before the walls caved in . . .

Understand that CHET BOSTICK (Maintenance) almost got ar-

Understand that CHET BOSTICK (Maintenance) almost got arrested for indecency the other day . . . It seems that CHET was walking around the campus with his hat off . . . Something new was added to SAM (Personnel) ROHRER'S face . . It was a corn cob pipe . . . AL MATHEWS (Training Supervisor) says when you spell his name just add one T and not two, please . . . GENE BARBER (Dial & Mat'l Stores) was tennis instructor at Camp Pine, Watertown, N. Y., during the war . . At present the former F. & M. net captain is tennis instructor at the Lancaster Country Club . . . HAROLD HERR (Service) climaxed his vacation by breaking his collarbone . . . Undercoverman 6% reports that the DEACON tripped over a worm on his grass patch and went down in flames.

#### EXTRA! EXTRA!

Sir Stork was a busy bird in July. He called at the homes of Sir Stork was a busy bird in July. He called at the homes of two members of the Engineering Department to deliver some valuable cargo. On July 14 at 3:45 A. M. he dropped a bundle of male dynamite down the chimney of the Osteopathic Hospital in the husky personage of little William Louis Dresher, a 7 lb., 11 oz. husky. Then at 5:41 P. M. on Friday, July 25, he delivered a valuable bundle of female pulchritude in bright eyed little Constance Ellen Hummel, 6 lbs., 13 ozs. Fathers Dresher and Hummel, naturally, passed the cigars and candy and carried through with the necessary bragging.



Snapped by Francie Meyer's camera taking a "break" between dances at the June Jamboree at the Maple Grove Ballroom was this group of swing and swayers. (L. to R.): Paul Stamm (Plate), Joan Shreve, Harold Smith (Insp.), Arlene Hoff (Sec. to Wyn Davis), Russ Hershey (Dial & Mat'l Strs.), Jean Doll (Tab.), Dorothy Mumma (Process Pln.) and Julia

#### TIME IS A SCIENCE AT HAMILTON

by E. Van Haaften

In the West Tower lobby outside In the West Tower lobby outside of the insulated vault containing the Clemens Riefler Astronomical Clock is a plaque on the wall containing the following inscription:

"Master Precision Clock
"Built especially for the Hamil-

ton Watch Company.



Riefler Observatory Clock is mounted on a concrete pedestal ex-tending to bedrock; protected against vibration and temperature variation. It is accurate to two one hundredth of a second per day.

"Standard time from this clock is used to adjust all Hamilton watches and to generate constant frequency alternating current for time microscopes. Its indications are accurate to within 2/100 of a second per day and are automatically checked daily with Arlington time signals...This clock is mounted on a 27,000 lb. insulated foundation and operates in a constant temperature of 85 de-

grees F. at an altitude of 395 feet above mean sea level."

Timing and timing procedures at Hamilton during the past 17 years have made considerable advancement both in accuracy and in reduc-tion of operational time. During the war the activity was accelerated to meet the need for even greater

The development and sustained production of accurate timepieces greatly depends upon the accuracy of the facilities used to measure their timekeeping qualities. For clarity the story of the progress in timing and timing procedures can be divided into three phases: timing of the balance, timing of the finished movement and timing of the cased watch.

Before relating the progress story of these three phases, an explana-tion is necessary of the time standard and the standard 60-cycle frequency used to operate the timing equipment throughout the factory, such as Time Microscopes, Record-ers, Comparators and Time Pro-

The purchase of a Riefler astronomical clock in 1930 was the first in a series of changes to provide a more accurate time standard. To assure the greatest possible accuracy, the new clock was mounted on a specially constructed concrete pier and enclosed in an insulated vault in the West Tower lobby to afford the maintenance of tempera-Improvements have been made at various times in the clock and in the vault's temperature con-

Ed. Note: This article is part of the story, "Timing and Timing Procedures at Hamilton" which was given by Mr. Van Haaften (Watch Research) as a speech at the H.I.A. Convention in Washington, D. C., in May. The story also will appear in the H.I.A. Journal.

clock used up to this time as the time source also was mounted in the time source also was mounted in the accordance of the clocks were provided with a contact on the escapement to furnish electrical impulses. a contact on the escapement to furnish electrical impulses every second, except the 29th, 58th and 59th. ond, except the 29th, soil and 99th. The electrical impulses were used to actuate a master relay controlling the "sounders" in the plant. Use of "sounders" to indicate the second is still employed today. But instead of the second impulses coming from the Riefler Clock, they

now are emitted from the quartz crystals clock located in the Watch Research section.

With the development of the stroboscopic method (the Time Microscope) of timing watches in 1930, it became necessary to develop a special source of alternating clock. a special source of alternating cur rent of fixed constancy to operate the instrument's synchronous mo-tor. Briefly, the first step in the original arrangement to develop this current was to use the Riefler's electrical second impulses to drive 4-beat slave pendulum. A contact mounted on the tip of the slave pendulum passing through a ball of mercury provided each ¼ second the required electrical impulse to drive the 60-cycle tuning fork. By the use of a permanent magnet, a 60-cycle current was induced in appropriate coils. This was further amplified to deliver sufficient wattamplified to deliver sufficient wattage at 120 volts to operate the motor of the Time Microscopes. In 1937 the original single fork unit and amplifying equipment was replaced with new dual fork units and amplifiers to provide greater power. amplifiers to provide greater power output to take care of the increased load due to additional timing equipment and to provide a second unit for emergencies for emergencies.

Hamilton's complicated Marine Chronometer program in 1942 made it imperative that a more accurate time standard and timing equipment be available to time these precision instruments. As a result, two quartz crystal frequency clocks were purchased. These clocks are now being used to control the constant frequency generators as well as the "second sounders." The factory's absolute time is obtained daily by radio from the Naval Observatory.

radio from the Naval Observatory.

(In this article Timing of the Balance is being omitted and will be discussed in another issue.)

The first major change in the method of timing the finished movement from the 24-hour method came with the development of the Time Migragory (Patent N. 2) The Time With the development of the Time Microscope (Patent No. 2,-024,799) invented by Mr. G. P. Luckey, now Vice President in Charge of Manufacturing. The instrument was first used in production in 1930.

The Time Microscope employs the principal of flashing a light five times per second, giving the appearance that a balance wheel which is exactly on time is standing still. Since the speed of the instrument's synchronous motor is freed at 5 synchronous motor is fixed at 5 revolutions per second, any shifting of the image when a movement is being timed is due to the off time of the balance. If the amount of image shift is measured for an exact time interval, the rate of the move-ment can be determined. The general procedure is to time the move-ment for thirty seconds. The scale on the instrument is calibrated for this time interval and reads directly in seconds per day.

It does not take much imagina-tion to picture what effect the Time tion to picture what effect the Time Microscope had on the timing pro-cedure of the finished movement. First of all, the 24-hour timing of movements to bring them to time was reduced to 30 seconds. This and in the vault's temperature control equipment, so that the average rate of the clock is now less than 02 of a second per day. The E. Howard weight-driven pendulum

duced the inventory of movements between 1/5 and 1/6 from what it previously was, and the amount of work output was doubled while the required personnel for timing was

The role of the Time Microscope has changed very little during the passing years, although some of the timing jobs have been transferred to the printed tape type recorders. The instrument is used primarily to check the time after the balance is assembled in the movements. About 50% of the balances vibrated require no screw change after are fitted in the movements; although of this quantity there are those which may require slight adjustment to the regulator. these movements are time these movements are timed, the operator makes the adjustment, within certain limits, to the regulator when necessary. In addition to checking all wrist watch movements for regulation, the operator also checks them for position error, dial up and pendant down. Pocket watches are given preliminary tim-ing and position tests on the Time Microscope prior to placing them on a 24-hour rating test for temperaire and position.
The Time Microscope or the rate

recorder has not replaced the final 24-hour period testing of cased There are too many watches. There are too many possibilities of malfunctioning which cannot be detected during a short testing period. The primary purpose of the Time Microscope and the rate-recorder is to facilitate the preliminary timing necessary to pre-



Twin quartz crystal clocks curate to two one hundredth of a second per day.

pare the watches for final 24-hour timing. Hamilton has found that the daily rating test cannot be dispensed with.

In spite of the fact that a considerable amount of training is required to produce a capable timer for 24-hour timing using the sound-er in combination with a clock, there has been little demand to rethis method with one requiring less training. In a few cases where necessary, in order to obtain a greater degree of accuracy, special equipment has been developed. two most important of these are the Time Projector and the Marine Chronometer Comparator.

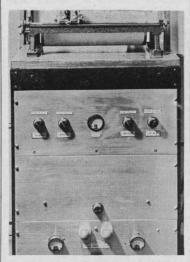
The Time Projector is used for timing watches having no second hand. The watch to be timed is placed in a fixture which rotates counter-clockwise precisely one rev-olution each hour, and by optical means the dial and hands are mag-nified and projected on a screen. The screen is calibrated to read to the nearest quarter minute. If during the 24 hours the minute hand has made the exact number of revolutions (24) as the standard frequency motor-driven fixture, the tion on the screen as it did the previous day. On the other hand, if the watch has gained or lost, the difference in hand location will then

be the rate.

The Marine Chronometer Comparator is an electronically operated precision timing instrument for reading dial error of marine chronometer of a sec

strument is first set to the master clock. Once it has been set, it will continue in synchronism with the master clock, since the Comparator operates from the standard frequency current. To time a chroquency current. nometer, the comparator mechanism is rotated until its hand, a second hand, is visually in synchronism with the chronometer sec Since visual setting is only approximate, an electric device i used for the fine adjustment. A microphone is placed on the crystal of the chronometer to pick up the second ticks which are amplified by the electronic unit and are then translated into flashing lights on the Comparator. Special means are provided to eliminate the half sec ond tick. Three lights on the Comparator indicate to the operator how closely she has matched the hands. If the center light flashes, she has matched them within a few hundredths of a second; if the right or left light flashes, this indicates that the Comparator's second hand does not coincide. The necessary correction is then made to make the center light flash. The amount that the Comparator block had to be rotated to match the second hand of the chronometer is indicated on a calibrated dial which reads directly to seconds and tenths of seconds. The hundredths of seconds are esti-From the dial error for two consecutive days, the rate can be determined. To maintain Hamilton's high

standard for accuracy, a continuous research program is maintained to study the performance of the watches and to develop procedures and equipment to increase their accuracy. To this end the Watch Recuracy. To this end the Watch Research Department has established a testing laboratory staffed by experienced timers who are provided with the necessary equipment to perform virtually all types of rating tests. In addition to their routine duty of timing experimental watches, periodic random selections of watches from production and from those ready for shipment are made and subjected to rating tests to check product quality. Special rating tests are continuously being made, such as temperature isochronal, position and practical rating tests of various types, all directed toward improving the accuracy of the Hamilton product.



Here Hamilton's own time signals are automatically compared with Arlington signals from the Naval

## WE'LL LOOK FOR YOU

Let's make the Hamilton Family Picnic on August 2 at Rocky Springs a success by being on hand. This year's affair is of a big league

nature and for a buck you can't go

There'll be free rides on six amusements as often as you like during the day. There'll be an amateur show, a softball game and, for you employees with happy feet, Bob Lyter's band will furnish music in the ballroom from 2:30 to 5:30 P. M.

## OFFICERS ELECTED FOR WOMEN'S BOWLING

Jane Hougendobler (Plate) was elected president of the Hamilton Women's Bowling League for the 1947-48 season

Evelyn "Mickey" Campbell (Service) is the new vice president.

The secretary is Mildred Heaps (Planning), while the treasurer Jean Hertzler (Dial).

Helen Rinick (Bal. Staff) is the assistant treasurer, while Betty Plourde (Dial) is the assistant secretary.

The captains elected for next season are: Jane Hougendobler, Evelyn Campbell, Julia Heida (Prod. Con.), Verna Wile (Flt. St.), Dot Shultz (Fric. Jew'l) and Virginia Phillips (Bal. Staff).

#### BURKHARDT NEW PREXY OF MEN'S BOWLING

At the recent Men's bowling banquet the 1947-48 officers were elected.

Andrew "Abe" Burkhardt (Service) is the new president.

Ed Long (Works Lab.) and former F. & M. soccer player, is the secretary, while Bob Coxey (Escape) is the new treasurer.

#### INTER-DEPARTMENTAL LEAGUE NIP AND TUCK

As of July 20, the Hamilton Inter-Departmental softball league is a p and tuck race with five teams there battling for the four covetnip ed play-off spots.

The play-offs started July 28 with Finishing, Engineering, Spring Room and Assembly Research competing in the round robin.

During the early part of July the underdog clubs snapped back to beat down top rung opponents. Office scored two wins to reach the fourth place contenders spot with victories over Timing & Casing and Spring Room, the latter win a two extra innings 3–2 victory.

Engineering, coasting along in first place nearly all season, was bounced into second spot by a pair of losses from Spring Room and Finishing, the latter club taking over the top post.

The regular season dropped its curtain on July 22.

The official final league standings

	Won	Lost	Pct.
Finishing	. 7	1	.875
Engineering	6	2	.750
Spring Room	5	3	.625
Assem. Research	5	3	.625
Office	4	4	.500
Service	4	4	.500
Г. & С.	3	5	.375
Metals Process	. 2	6	.250
Friet Low'l	0	Q	000

#### WEDDINGS

Three employees in Finishing went and "did it."

Norma Martin (Fin.) mar-Norma Martin (Fin.) married S. Merle Riggs of New Providence on June 22 at Evangelical U. B. this city. James Weaver (Fin.) and Sarah Hanna (Escape) coupled up on June 28 at Valley Forge, while Catherine Blosser. Forge, while Catherine Bloser (Fin.) middle aisled it with John Welsh, Lancaster on June 28 at St. Joseph's Rectory.

#### **SPORTS SHORTS**

BOB BRANER (Spring Rm.) is of the opinion that it's silly to think that any of the top teams in any of the local baseball leagues could beat the lowly Lancaster Roses of the Inter-State circuit if a game could be arranged at the conclusion of the present diamond campaign as was suggested in the local sports sheets a few weeks ago. "I'm well aware," says BOB, "that in one game anything could happen, but don't forget that the Inter-State league is a fast Class B circuit. In comparing the average players in both leagues, I would say that the Inter-State performers are much better ball players. Looking at it from another angle," BOB continued, "a game of this nature would mean little to the Roses because it would be tough to keep the team in town after a long season such as is played in the Inter-State. A ball player gets tired after going through 100 games and therefore a contest of this nature would hold little interest for them." BOB should know whereof he speaks because he presently is playing left field for Bird-in-Hand, a top team in the City & County circuit, and earlier in his diamond career he patrolled the outer gardens for both Lancaster and Allentown in the Inter-State loop. BOB BRANER (Spring Rm.) is of the opinion that it's silly to think

It's just a suggestion submitted by CARL YECKER (Eng. Services), president of the HRA, but if carried out it could mean a lot of noontime pleasure for all HAMILTON employees. CARL wonders if the Barr Office Building, now used as a storage house, couldn't be converted into a recreation room. CARL suggested a similar plan some months ago, but nothing was ever done about it. Who knows, maybe someone might react to CARL'S latest suggestion? At least the thought is definitely worthwhile mentioning. is definitely worthwhile mentioning.

ALBERT "MICK" KIELY (Bal. Staff), ye olde St. Anthony C. C. athlete, hit the sports pages recently when he topped a field of 101 entries to cop the Blind Handicap golf tourney at the Overlook course with a 64. MICK'S actual gross score was 82 with an 18 handicap giving him a 64. Now the fact that his gross score was 82 doesn't make MICKEY happy because he's been playing golf ever since he gave up pablum. But he does smile when he tells you that it was just the third time he was out this season.

TED HIBNER (Dial) spent his vacation up in Potter County. TED relates that one morning while just idling along in his car down a mountain road, he saw something that he never again expects to see mountain road, he saw something that he never again expects to see in his life. A grouse (mountain pheasant) ambled out of the brush and into the path of the car. It didn't seem a bit frightened. Immediately TED stopped the car and shut off the motor. In a few seconds the grouse retracked its steps back into the brush. TED let his car drift down to where the grouse had gone in. In less than a minute TED said the grouse reappeared with a family of twelve little ones trailing after her. In single file fashion the grouse family waddled down the gulley alongside the road unmindful that any human was around. TED said he always figured that grouse were the wildest of the mountain birds and that they most certainly would seelude their young. mountain birds and that they most certainly would seelude their young. This mother, evidently, was out to associate her family with as much social life as possible.

LEONARD "KISSY" KISSINGER (Service) has been umpiring base-ball and softball games around Lancaster City and County for 12 years. He would rather call 'em on the base paths than behind the plate, de-He would rather call 'em on the base paths than behind the plate, despite the fact, that most squawks come from base decisions. However, he does work either job when his assignment calls for it. KISSY likes umpiring because he loves the game. "I can't play baseball so I figure the next closest association with it is in the role of umpire," said KISSY. His Dad was a good ball player and his older brother was a top drawer softball pitcher a number of seasons ago. KISSY has been called all sorts of names by players and fans alike. He says he doesn't mind it. One time a player down in Quarryville threatened to break a bat over his head if he didn't call 'em right. KISSY cooled this hot rock down by tossing him out of the ball game. LEN weighs 220 and threatened to lean his poundage on a catcher's back one night when the backstopper refused to squat behind the plate in regulation fashion so that KISS could get a full view of the plate to call them. His favorite big time arbiter is George Magerkurth, the mammoth, deep voiced boss-man of the National League umpiring organization. KISSY figures that he'd need a great deal of schooling on the technical phases of the sport to advance into organized baseball umpiring circles. He says that's not for him, that he'd rather remain just an ordinary umpire. The most important thing to KISSY is that he's close to baseball and that's where he wants to be. wants to be.

Speaking of top softball pitchers in this old town has anybody mentioned the name of RED FITZGERALD (Plate & Press), who windmills 'em in for the Watch Ten in the City & County Softball League. RED has been tossing 'em across the platter for eleven years. As of July 10 his loop record is six wins and one loss. RED has a good fast ball and an assortment of stuff. He's easy to handle and unlike most pitchers is an exceptionally fine hitter. He's one of the most dependable bunters on the Watch team. RED started pitching with Farnum in the City circuit in 1936. Down through the years until the war, he worked on the mound for the 8th Ward, Young Republicans and the 6th Ward teams. During the war he pitched for the Peninsula Base Section Chow Hounds, one of the best service teams in circulation. After his discharge from the Army, he returned to pitch for Hamilton. RED has never hurled a no hitter, but he has tossed a number of one hitters. His experience has worked wonders with his control and presently he is one of the most respected hurlers in the rugged City & County league.

This dark horse entry is kicking the teeth out of the opposition and presently is perched on top of the circuit with 13 victories and 3 defeats. The Hamilton team is being pressed all the way by the Lancaster Maples, the pre-season favorite who is in second place with 12 wins and 3 losses. Two of the Maples three defeats came at the hands of the Hamilton team. On August 2 and 3, the Hamilton team will enter the Lancaster City and County softball tourney at Maple Grove in an effort to knock off the district title at Reading and ultimately represent the State in the National Softball tournament to be held in Ohio later in the season.

# MEN'S S. B. TEAM TOPS

#### INTER-DEPARTMENTAL LOOP STARS SELECTED

#### League President to Play In Two Games

The Hamilton Men's Inter-Departmental League All Star softball team for the 1947 season has been selected and will play the all star teams of RCA and Armstrong's in a pair of games, according to an announcement by Jack Sherick (Service), president of the league.

The All Star roster will consist of

18 players. Thus far 16 players have been selected by Prexy Sherick, who is looking around for two more performers.

The All Stars will first step into circulation against RCA on August 2 at the Family Picnic at Rocky

The All Star roster is composed of the following players: outfielders, Frankie Remley (Office), Chet Groff (Finishing), Bill Rhoads (Spring Rm.), Paul Afflebach (Spring Rm.), Infielders, Red Shanabrook (Finish ing), Dick Ochs (Spring Rm.), Al Kopf (Assem. Res.), Johnnie Hilt and Jim Ault (T. & C.), Luther Lintner (Service) and Ken Bernhardt (Eng.). The catcher is Howard McClain (Assem. Res.), while the pitching staff consists of: Bob Welsh (Office), Wally Bork (Eng.), Phares Ulmer (Service) and Danny Keen (Finishing).

The team will be managed by Prexy Sherick.

In picking the team Sherick said: 'It was a tough job trying to select 18 players from the eight team loop What made it tough is the fact that all the clubs in the circuit are evenly matched which means that the play ers are nearly all of equal ability. In selecting the club, I tried to pick the players I thought were out-

standing during the season."

Concerning the game with Armstrong's it definitely will be arranged. Prexy Sherick is anxious to turn the Hamilton Stars loose against outside competition to get a line on the strength of the Hamilton circuit.

# STEADY, BUB!



This is Charley Sheeler (Finishing) fishin' in his sleep at Tilgh-Island down in Maryland. Charley, it is reported, sang to the fish and his music was so sweet it rocked him to sleep. Ten'll get you twenty when the cigar in his right hand reached the skin, he got Also on the trip with Charley on June 27 were six Finishing Department mates. Hal Zieg-Johnnie Todd, Bill Garden, Bill Mellinger, Johnnie Stolzfus and

#### HAMILTON PLAYING SUPERB BALL IN RUGGED CITY & COUNTY LEAGUE

# Squad of 18 Picked by DICK RUMMEL HURLS A ONE HIT GAME

On June 17, a husky, 18 year old youngster hurled a one hitter for West Lampeter in the Junior City & County Baseball circuit, beating Akron, 2–0, for his fifth victory against no defeats this season.

Among those five wins are included a two-hitter and a three-hitter

hitter.

Last year this same fire ball artist whipped ten opponents with his amazing assortment of stuff and was turned back but one time to give him a two season record of 15 victories and one defeat in Junior City & County League competition.



#### DICK RUMMEL

The pitcher, Dick Rummel, who works with Chet Bostick's "Yard Engineers" during the summer months, is a Junior at West Lampeter High School. He pitches for his high school team and while his record of four victories and 10 defeats isn't too impressive as a scholfeats isn't too impressive as a scholastic hurler, the fact remains that his mates played loose ball behind his pitching and the hitting was of a weak tea nature.

If Dick gets the opportunity to get into organized baseball, he said he will jump at the chance. Dick, he will jump at the chance. Dick, who is a modest guy for all of his ability, expressed his view in a few

words.

Dick said: "I like baseball and if I'm ever good enough to attract some attention from some big league scouts and they offer me a chance, I'll take a crack at it. I remember one game I pitched, I saw a couple fellows get out of a car with an out-of-town license on it and watch me work for a few it and watch me work for a few innings. I don't know whether they were scouts or not. Some of the fellows said they were."

Dick figures that if he goes on winning games and doing the best he can, maybe the boys will be back and this time leave their calling

## **QUOIT TOURNEY**

According to an announcement by Joe Butson (Damask.), who is in charge of the Hamilton Men's Quoit tournament, play will start for championship honors in singles and doubles on Monday, August 11. All entries should be sent to Butson as promptly as possible.

The Hamilton Men's Softball the Hamilton Men's Softball team in the rugged City & County Softball League is fooling a lot of the pre-season dopesters who picked them as just another ball club in the race for circuit honors.

Another HAMILTON team on top is the Girls' softball club in the City industrial league with six victories.

Industrial league with six victories and no defeats as of July 28 . . . The "top" triumph to-date came on July 24 with a 7-3 victory over RCA... It was the first time the HAMILTON team bumped RCA in two seasons... This win enabled HAMILTON team bumped RCA in two seasons . . . This win enabled RED SHANABROOK'S team to break a first place tie and take the top perch undisputed from RCA . . . JOYCE SCHASKER (T. & C.) was the winning pitcher . . . Her alert battery-mate was BETTY (They Can't Make Me Wear a Mask) FORREY . . . Coach SHANABROOK says the thing that keeps the HAMILTON team on top is the will to win plus a lot of scrap.

Bob Braner, boss of the Hamilton team, gives credit to all the

Bob Braner, boss of the Hamilton team, gives credit to all the boys for their sterling brand of ball. Bob said: "We have a bunch of boys who want to play ball and who like to play ball. They're easy to handle and they have plenty of the old hustle. We have no stars, just a team that plays together to just a team that plays together to win ball games."

The team's roster consists of:

George Dommel (Spec. Assem.), first base; Charley Gehr (Sm. Tl.), captain and second base; Red Bauer captain and second base; Red Bauer (Mach. Shop), shortstop; Bogie Emerich, third base; Woody Stetter (Spec. Assem.), left field; Harold Fiester (Mach. Shop), center field; Bob Smith (Mach. Shop), right field and Charley Peters (Press) and Vern Hilt (Mach. Shop), catchers. The pitchers are: Red Fitzgerald (Press), Don Cameron and Hack Elmer (Flt. St.). Charley Witmer (Fin.) and Paul Hershey (Watch School) are the utility players. School) are the utility players.

At the present time (July 18), four

Hamilton batters are listed in the top 15 hitters in the circuit. Fiester is fourth with an average of .400, while Bauer is eighth with .361. Dommel follows in 11th spot with .328 followed by Stetter in 14th place with a .312.

The Hamilton team is definitely the play-offs. The title will be in the play-offs. The title will be decided among the first four clubs who will fight it out for loop chambral achievement that a competition pionship in round robin competition.

# PITCHES 20 INNINGS

Charley "Bing" Miller (Assem. Res.) pitched and batted his Millersville team to a 20 innings 2-1 victory over Mountville in a City and County baseball loop fray on Saturday afternoon, July 19.

"Bingie" went the full 20 innings. In the last half of the 20th with Maxie Bishop on second base, Miller singled him home with the winning run.

The following Monday morning "Bing" was still a tired and stiff hurler from the long grind. He gave full credit to his opponent Freddie Copeland, the little Mount-ville southpaw who likewise went the full 20 heats. "He's a great little pitcher," Bing

Bing continued: "I've pitched in extra innings games before, but they were 12 and 13 inning frays, never 20. It was really rough."